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PERCEPTIONS OF POWER, CONTROL, AND ENVIRONMENTAL
SETTING IN A SMALL BUSINESS ORGANIZATION.

Submitted by TERRY W. CASEY
for the degree of Ph.D of the
UNIVERSITY OF BATH.
1987

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ABSTRACT

The thesis is addressed to the organizational analysis and functioning of a small manufacturing company in an oriental setting. Certain hypothetical assertions act as pillars to the structure of the work as it was developed. Firstly, the phenomenon of Power is seen as pervasive in the organization, particular in a business enterprise where the successful negotiation of market opportunities may be crucial to survival or growth. The very creation of such an organization was an act reflecting the power of the founding contributors and this authority is perpetuated by the senior executives who run the major functions. Power as a function is relatively neutral unless it is related to results, and therefore Control is advanced as the most likely resultant of the use of power in the organization. Power and Control are seen as the twin cornerstones of organizational activity, cause and effect, and hence a definition of their natures and their perceived significance in the organization is a central focus of this work. As we stay inside the organization and look outwards, two other dimensions are apparent. Firstly every organization conducts its affairs in one or a number of organizational settings. Arguments have been advanced that Environments condition the nature of organizations and vice-versa. Whatever the emphasis, very few organizations can afford to be impervious to forces in their environments, especially those such as this organization which manufacture and sell. Finally, the relevance of Culture in the context of the organization is examined. Whilst culture might ordinarily be defined as an influence transferred by individuals, the question is also ad-

dressed as to whether the subsidiary of a multi-national organization is in itself a cultural entity, bearing its own distinctive characteristics. These four dimensions of organizational activity are approached using the organization as a stage on which a play is being enacted. The seven principal actors on the stage are the most senior managers in this concern and they speak their lines in response to a lightly-set agenda on the importance of these dimensions from their position on the stage.

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CHAPTER IINTRODUCTION

When a candidate addresses himself or herself to the investigation and analysis of a situation which is directed towards a thesis, the approach does not occur in a vacuum, but can normally be identified within a "climate of thinking" about the subject. An example of some of these approaches will indicate how different they can be depending on the nature of the subject concerned. In certain physical sciences and technological disciplines, the impulsion towards objectivity and purely mechanistic criteria is likely to drive the candidate to subordinating all aspects of personal feelings save the intellectual calculus by which physical matter is objectively assessed. In this environment, the search is for an objectively-stated set of truths which can be demonstrated according to universally-testable precepts. In this area of work, a major premium is placed on constant replication to re-confirm universal validity and on the definition of more, inevitably more recondite, universal precepts. Some distance in from this position is that occupied by the biological sciences, where the presence of the animal form of life makes for less certainty and predictable behaviour, although many scientific conclusions may still be generally valid. At the other end of the continuum stands the candidate whose subject discipline places the emphasis on individual creativity. This group could embrace literature, philosophy and music, amongst other subjects. It is in this area that the applicability of scientific enquiry becomes questionable, where another set of rules

relating to choice, style and taste seems to apply, even when the subject is approached by way of a critique of other people's work than the generation of original modes of expression.

If we extend the analogy to organizational analysis, which is the theme of this thesis, we might at first sight conclude that the "climate" of the subject lies between the two extremes outlined above, since organizations are made up of both people and functions or material things. The efforts of a multiplicity of writers give ample evidence the polarisation of emphases from the scientific, systems-orientation of the functionalist and decision-making schools to the more personal, interpretive approach of those who define the human agency at work in the organization. When a writer approaches the issue of what makes an organization perform and do so in a particular manner, it is not possible to avoid identification along some point of the continuum described, even though respective emphases of the schools of thought may be in debate. Other factors may affect the nature of the analysis carried out. Organizations are invariably in a state of change and development over time, and this dimension alone represents a formidable challenge to the analyst. The status of the analyst as an observer may also interpose an influence on the nature of information gathered, the typicality of the situations taken in, and the conclusions reached. The writer was also himself aware of having been a member of different working organizations for more than thirty years and the probability that this accumulated experience may have had an influence on his perception of how organizations work.

The curiosity which led to the development of this thesis may be defined by means of the questions which arose in the mind of the writer as he approached the organization which is at the centre of this work. A primary, fundamental question arose over the cause of what went on in the working of this organization. The organization had not come about by accident, but by a deliberate act of "political will" reflecting a power or authority to undertake a sphere of activity within a particular society. For this reason the character of power as a causal element became the first area of questioning. The second area was related to the first. What happened when this power was used? What were the means and the ends for which for which it was exercised? The provisional answer emerged in the form of control, which is prevalent in every organization except those specifically dedicated to anarchy. The third area which evoked curiosity was the context in which the organization went about its affairs. Conventionally this is described as the environment or, more accurately the environments, which may be said to embrace the world, a region, a country or territory as well as economic, social, or political systems. The final question in the mind of the writer is to do with the role of culture in the working of the organization. It could be argued that this is part of the environmental issue just mentioned. Whether this is true or not, the curiosity remained there and constituted a fourth major area of questioning with regard to its relevance to the organization and its workings.

The selection of the population of the enquiry says a great

deal about the underlying assumptions to the work. One organization was selected - a manufacturing concern called by the fictitious name of Oriental Gas Products, employing rather more than 300 people. This choice precluded the kind of inter-organizational comparison which some authors have deemed to be useful in other initiatives in organizational analysis, particularly those working within the functionalist paradigm. The incorporation of personal perspectives and functions from within one organization is a path which has been trodden with distinction by some writers (Roethlisberger and Dickson (1939), Selznick (1949), Gouldner (1954), Rice (1963), Crozier (1964), Emery and Trist (1965), and Thompson (1967)). In effect, the choice of one organization for this work puts it within the ambit of contingency theory, which was described by Child (1973) as "the dominant paradigm in the field of organizational analysis". The term "contingency approach" is in a sense a challenge to the universalistic view of why organizations formulate and operate as they do (summed up in the phrase "it all depends"). There would be some who argue that the contingency approach is in itself "anti-theory", since it takes up a position which eschews any formal identification with any particular theoretical thrust, whether based upon empirical evidence or not, and considers the position of the organization from the point at which it is encountered at a moment in time.

A number of authors have criticised contingency theory as not standing up to the rigours of empirical testing (Pennings (1975); Kaiser and Kubieck (1977), Schreyogg (1978, 1980)), despite the obvious

fear that this may be a question of testing the wrong theory with the wrong methodology. In particular, Shreyogg (1981) complained that it is not always possible to find reasons (sample, measures, interviewer bias, etc.) to excuse or "explain away" a result which appears to refute a theory, so that it need not be taken into account. The term "contingency theory" came into general usage in the 1960's with a number of contributions focussing upon the interaction of the organization with its environments (Burns and Stalker, 1961; Lawrence and Lorsch, 1967), suggesting that one might influence the other or that a form of mutual adjustment might take place. In certain other approaches (Woodward, 1958; Perrow, 1967), the impact of technology in affecting organizational design was also put forward, at the same time suggesting that environments and technology might be linked. Two important elements in contingency thinking are that there are forms of causal linkages between the organization and its environments in particular and that this is underlined by the perspective that organizations are not closed societies, but living examples of phenomena which co-exist openly with other systems.

Other examples of the effect of the selection of population sample on the nature of this research will be apparent. The organization selected was a manufacturing concern in the private sector of industry operating in a singularly capitalistic society. To ignore this political contingency of an organization's environment would be to overlook an important aspect of managerial conditioning and objectives especially as the small territory which was home to this organization was

contiguous to a huge nation of radically different political and industrial philosophy with which it was in the process of developing joint ventures. Another specific choice was made in the selection of the managers of this enterprise as the vehicles for eliciting perspectives on the organizational dimensions under scrutiny. Some researchers in this area might have chosen to ignore the views of people as actors altogether; some might have argued that the selection of a small group of managers was too exclusive and put forward the merits of a more widely-selected group. This reasoning was not followed in the selection of a small number of people of managerial level, since it was these managers who individually and collectively took the decisions which guided this organization forward.

The basis of the research elaborated thus far has touched upon the role of actors in the organization who are linked to systems inside and outside the organization, specifically those related to environmental forces and the cultural milieu in which they find themselves. A further perception is that the creation of the organization is a political, as well as economic and social, initiative. The term "political" is used here in the sense that the organization represents a legally-constituted organ of power in the community to undertake the task which it has set for itself. Within the terms of this arrangement, the principal actors or senior managers are seen as possessing a form of power which would not be theirs if they were not formally associated with the organization. This power, or authority, is also a major part of the research, for without it the engine would appear to

have no fuel. It follows from this that if this power is effective, it will have an outcome in the various forms of control which are instituted and which are an inevitable part of organizational functioning. These elements may appear to be random pickings from the working of an organization. In fact, they are seen to be linked in a sequence which is illustrated in the recent historical development of the structure of this organization and which, given the central importance attributed to the actors' perception of the organization's working, are put forward as core elements in the drama.

The juxtaposition of three distinctive elements in the approach of this work draws upon traditions which have very different roots in organizational analysis:

- The use of principal actors giving their perspectives on the working of the organization: a dramaturgical view.
- The identification of Power and Control as two of the most important forces, cause and effect, in the addressing of management to the tasks set. The functional imperative of these two forces can be traced back to some of the earliest attempts to define the paths that lead to action in organizations.
- The systems linkage between the organization and its various environments, including the cultural milieu, which focus upon the external relations which are important for virtually all organizations.

It is commonplace in criticism of organizational analysis to take the

position that contributions coming from different perspectives are mutually exclusive, or at least to play down the value of approaches which do not fit that espoused by the writer in question. Such a criticism was advanced by Mangham (1978) in a spirited advocacy of the dramaturgical emphasis in the face of the widely held systems view:

"The adoption of the systems perspective leads in many instances to a view of human behaviour as an expression of the bombardment of forces upon the individual. From this perspective the human beings are not important, but the non-human, measurable variables assume great importance since it is these that constitute the bombardment. It is these factors that are internalized by the individual and which, it is assumed, control his behaviour." (p.6)

"The problems of systems theory, as I see them, are implied in much of the foregoing: its relative lack of concern with the individual actor, its consequent emphasis upon social facts external to the individual actor, and its heroic overuse of positivist approaches to data collection" (p.7)

The fundamental split which we see outside the bounds of organizational analysis, as well as inside, is between a form of naturalistic or positivist sociology on the one hand and the humanistic or interpretative sociology on the other. It will be clear from the "three distinctive elements" outlined earlier as bases for the development of this work that the author does not believe that the different traditions are necessarily and mutually exclusive, and that there are grounds for thinking that they may be in some senses complementary. The posi-

tion here has been strongly influenced by Berger (1963) and Berger and Luckmann (1966), who asserted that "reality is socially constructed" and therefore a sociology of knowledge has as its primary task the analysis of the process by which this occurs. They acknowledge an objective reality by defining reality as "a quality appertaining to phenomena that we recognize as having a being independent of our own volition (as we cannot 'wish them away')." Berger and Luckmann observed that we all seek knowledge or "the certainty that phenomena are real and that they possess specific characteristics" in our daily lives. Social enquiry, therefore, engages in a more particular search for "knowledge" and "reality" that is "somewhere in the middle between the man in the street and that of the philosopher". The man in the street - the managers in Oriental Gas Products in our case - "know" their reality without taking time to analyze it systematically. The philosopher is forced to look hard at the validity and invalidity of knowledge. However, the sociologist cannot be taken up with the philosophical question of "what is really real?" Rather he or she must focus on how social reality comes about, regardless of its validity. Sociologists do not debate whether a chair is really a chair or whether a family is really a family: they take such labels for granted. They take the apparent realities of society for granted and proceed from there.

The central point emerging from this discussion is that there are multiple realities rather than a single reality. Society is a product of people whilst at the same time people are the product of society. According to Berger this two-way traffic results in society having the characteristic of being viewed as an objective reality as

well as a subjective reality. On the one hand the human being is an instrument for the creation of objective social reality through a process described as "externalization", or of interaction with an existing social structure. This objective reality then turns back on people in society and through a process of "internalization" socializes the individual into becoming a member of society with certain perceptions of the world.

In the example of the organization we have selected for this work, the individual could theoretically be any person who is employed by Oriental Gas Products. Seven principal actors have been selected, however, since they hold the most senior managerial posts in the organization and hold a greater power than any other individual or group to have an effect on the affairs of the company. This supposition might have been questionable if, for example, there had been a powerful Trade Union caucus in the company or industry which had an effect on decisions taken or if a technical specialist outside the managerial group had special powers to determine the fortunes of the concern, as demonstrated by Crozier (1964). Since this was not apparent in either case, the selection of a population sample of managers who are synonymous with a power elite within that concern was natural and obvious to the writer. This view is not shared by others, notably Whitley (1977), Clegg (1977), Benson (1977), Salaman (1978), Burrell and Morgan (1979), Clegg and Dunkerly (1980) and Reed (1985). Their view was summed up by Clegg (1977):

"Much of the produce of organization theory has been developed at the

interface of capitalist theory and capitalist practice in the academic institutions of business. Here it provides both a market and a meeting place for theoreticians and organizers. For these organizers it functions as part of the rhetoric of rule, encapsuled in O & M, work study, job evaluation and the rest. As such, it is assuredly a theory for the organizers of the organized."

This position may be questioned on two grounds relating to the current research. Firstly, the Clegg assertion appears to confuse the tools of managing an enterprise, which for the most part are distinctly a-political in their nature, with what he perceives to be the "political" stance of the actors in a great deal of organizational research. These tools are a common feature of organization of people, materials and situations irrespective of the political context in which they are used, and so to brand them as part of the capitalist structure hardly reflects reality. Secondly, a writer does not have to be identified with the population sample if he perceives them to have the major elements of power in a situation. This research could, for example, have emanated from the role of the Polish Trade Union Solidarity in challenging the authority of the formally-constituted Polish Government in the early 1980's, a marxist-led revolt in a country, or the removal of a Head of State by a minority group of nihilists. What they share with their capitalist, managerial counterparts is a form of power to influence events, temporarily or permanently. The quality of this power is the focus of our interest, rather than the colour of the banner which they bear before them. Where the two are linked, it is to be noted in the

analysis, though not confused with the motive for undertaking the research in the first place.

The society confronting the principal actors in the case we have chosen has two layers - the organization itself and that outside the walls of the organization consisting of the social, economic, and political elements of the broader society in which it is embedded. These two forms of objective social structure have a character of their own. To this extent the work follows Durkheim (1938) and Berger (1963) in recognizing that these social structures must be seen in terms of human externalization or people interacting in an already existent structure with the purpose of creating a form of order in social life out of a wide diversity of human experiences. It could be argued that ideally all people are externalizing or contributing to the organization or society of which they are part. However, the case that the contribution of some people has an infinitely greater impact on the organization or the society than many others hardly has to be made out, and it is for this reason that attention has been focussed upon those in positions of authority in this organization. The roles which these individuals fulfil are the vital link in the process of creating an objective social structure.

The reversal of the forces from the individual creating a social structure is a dialectical process which socializes the person into becoming a member of a society. Berger and Luckmann (1966) described this as "internalization", when a given institution or society fashions the outlook of the individual. They outline the primary

socialization which goes on in childhood when the child is introduced to the objective social world with its parents acting as intermediaries, often building in their values and perceptions in the process. In normal circumstances the child will grow up to formulate his or her own interpretation of reality. This process is going on all the time and by this means individuals create institutions and society as their subjective reality. Some writers, notably Blumer (1969), Goffman (1959), and Garfinkel (1967), have gone out of their way to stress subjective reality over objective reality. However, this must only be a matter of emphasis, since whatever our perceptions we are regularly made aware of "the world out there" that will not go away, and may even take on forms which can be different from the way we see them.

The purpose of this thesis is not to attempt a comprehensive theory of organizational functioning, which the writer regards as an impossible ideal. The motive is infinitely more naive in its conception, which is to encounter an organization at work, look at the extent to which it achieved the objectives set for itself and - most importantly - to examine the people and processes by which it did what it did. Such a task could not be achieved in a vacuum since, when all the special characteristics of the work situation were taken into account, the writer was himself a product of the background which had brought him to this point. Few would disagree that when a person is examining inanimate objects in the setting of natural science the role of the personality is minimal if not totally excluded from the process. When people are taken into account, a crucial question of assumption is whether

(as we see in a great deal of the contributions of a functionalist approach) the mode of enquiry is totally impersonal or whether the actors in the piece are given free rein to any degree to represent their perspective. The balance between the objective and subjective is present in this work, with an emphasis towards the latter insofar as a considerable amount of time was taken up with individuals in the organization allowing them to put forward their perspectives.

A Relationship Develops.

It will be clear from the discussion thus far that shape of the research emerged from a variety of factors which were as much to do with my own developing personality, age and experience of working organizations as they were with the quality of reception and access granted by this company. This is admittedly a partial position to have taken up, but partiality and a selection of methodology are inevitable. It is perhaps illuminating to trace in practical steps how this situation came about and the reasons why the character of research emerged in the form it did.

My background is similar to many people who are currently holding teaching positions in Universities and Polytechnics who graduated in the 1950's, some ten years before the Franks Report and the rapid development of the Polytechnics gave a framework to business schools and management education in the United Kingdom, although such developments were well underway in the United States. Upon graduation, a number of people like me moved into the business world as management trainees, without any formalized training for the managerial tasks which we would be undertaking and with the unswerving

hope that somehow we would pick up the essentials of a manager's role in the organization by a series of secondments, projects and experiences which were popularized in the phrase "sitting with Nelly". The managers whom I encountered were very much older, rarely if ever trained for the specifically managerial tasks they undertook, and invariably imbued with the systems and specialized tasks which were the feature of their job. Education in management was deemed to be "a useful thing if you can get it", but in truth the provision was scarce until the second half of the 1960's and even then a full-time commitment to a course was seen to be the preserve of the young, since it was difficult to break a managerial career already in train.

I made a change of career direction after ten years of ploughing the practical managerial furrow into being a management educator, for the most part over seventeen years in Hong Kong. The situation that now presents itself is of a person in a full-time educational career for which there had been no formalized training except a familiarity with the social sciences from an undergraduate standpoint and an awareness of a number of practical management problems from direct experience. From where, it could be asked, did the impulsion to thinking about concepts of management emerge? The reasons for an impulsion in this direction are wrapped up in my experience and the stage of career reached at around the year 1963. Apart from being at the mid-stage of a career in management itself, I had taken up the part-time task of teaching management studies in the evening at South-East Essex Technical College in Barking. At the time I was unaware that this College was the seat of the research being carried out from this time onwards into organizational activity by

Mrs. Joan (later Professor) Woodward (1965). The effect of this part-time activity was that I was now for the first time confronted with the situation that I was not only attempting to practise management from a professional standpoint, but that I was also being required to address my thoughts to the conceptual basis of what I was practising. The dichotomy was made increasingly clear in my mind between the mass of managers practising what is arguably the largest profession in the world, the large majority of whom on a global basis are untrained in the skills which make up their profession, on the one hand, and a body of knowledge contained in the literature which was a mixture of specialized techniques (such as in accountancy and production control) and a burgeoning array of theoretical concepts (especially in the behavioural area) which, if the managers could be persuaded to read them, served a variety of purposes which could range from assisting them in specific areas to confusing them on account of the multiplicity of offering.

It is illuminating to compare the preparation for a career in management with that of a career in medicine. In the case of the latter, the licence to practise is granted only after years of formalized, University-based, training involving the theory and practice of patient care. The high level of the training ensures a degree of exclusivity which allows the doctor to practise in a relationship with a patient in which the latter is only expected to have a very basic knowledge of managing the body, usually confined to expressing symptoms. In the case of managers, the vast majority are not required to obtain a licence to practise, and so this large group pursue their professional path in a hybrid role of being both doctor

and patient, whilst the emerging Schools of Business solemnly declare that they are in the business of producing the managerial equivalent of doctors. It has been estimated on a global basis that the number of managers practising who are formally trained in management rarely rises above 1 - 2% of the whole group.

Given that from 1963 onwards I was a part-time teacher of management (a role transformed into a full-time commitment in 1967), I had to come to terms with the conceptual fabric of management. A major influence in this process came from a reading of what are now considered to be "management classics", such as Urwick and Brech's "Organization" (1948) and others, which emphasized management as a function comprising sub-functions such as planning, control, co-ordination, representing, decision-making and so on. Such other influences as were evident to a person of my background in the field were in the emerging emphasis on Systems Theory, whilst research in the behavioural aspects of management was also dominated by a functionalist, positivist approach with a tendency to measure functions and even managerial beliefs and value systems.

Whilst considering conditioning factors in organizational analysis, I could not discount the reality of living and working in Hong Kong. Being the place that it is, it is a small, somewhat cut-off enclave with for the most part limited access to Mainland China both geographically and in terms of language. One's contact with people from the outside world is necessarily limited to people passing through from time to time and a liability on their part to be thinking of the pleasures of sight-seeing than to exchanging ideas on organizational analysis. The majority of business enterprises are small, with a strong tendency to paternalistic styles of management,

which is a commonly-observed feature of Chinese management practice. The subsidiaries of multi-national organizations, such as Oriental Gas Products, are for the most part relatively small and, in the main, a clone of the organizational features of the parent organization that begat them, and usually to a degree restricted in the range of radical independent managerial initiatives that may be taken by those in positions of authority. In a consideration of the way in which the research was developed the situation described in Hong Kong, leading to a leaning on established literature precepts, was built on the foundation of a small amount of preparation for the task of teaching management as a discipline and the somewhat limited perspective described on the developing concepts in organizational analysis.

The Research Idea Develops.

The initiative for research access to Oriental Gas Products was made in the latter part of 1979. Within the following eighteen months an exploratory visit to the organization in Hong Kong was extended through a travel grant into the opportunity to visit three other associate companies within the same multi-national group in Singapore, Malaysia and Indonesia. Each of these organizations employed some 250 - 300 staff, and at the time of the initial preliminary visits seemed ideally suited for comparison on an inter-organizational basis. The approach at this stage was based on a questionnaire as a pilot study to the senior managers of each organization. The questions were developed around the major dimensions of curiosity - Power, Control, Environmental Interaction and the Role of Culture - using most commonly a five-point scale for responses. These preliminary encounters must be seen as an extension of my background as described:

the reflex action of a person with such a background to the notion of "the way to proceed" in matters of research. The essence of the approach was that the principal actors could be treated as reactors to a scenario put forward in detail, that meaningful deductions could be made from standardized responses, and that inter-firm comparisons were the appropriate focus of work of this nature. As the response patterns were put together in provisional form, it became increasingly clear to me that I was presiding over the final outworking of an approach to social science research which had been inculcated into me from an early age: that social situations can best be embraced by the tools of the physical sciences. In coming to terms with human agency, and most especially in dealing with the transfer of cultural values through that agency, I was made increasingly aware that inter-firm comparisons and standardized measurement overlook the nature of what I was dealing with: the unique and rich nature of the contribution of key players on the stage, their interaction with each other, and the need for them to articulate on their feelings without a sense that they had to follow a line of questioning with which they might not be comfortable.

The preliminary work continued on a part-time basis for many months before and during the period when doubts were formulating in my mind over the methodology. I had not sought access to or the permission of the co-owning French company since, despite their 50% holding in the operation, their physical presence in the Hong Kong company was limited to one executive who was relatively junior in the hierarchy. The patterns which emerged from the preliminary questionnaire studies showed some similarities here and some differences there, without

engendering any confidence in me that I was tapping the reality of the situation in a meaningful way. It was at this juncture that I entered into two further and significant negotiations with the Managing Director of Oriental Gas Products in Hong Kong and Mr Paul Bosonnet, who was third in ranking with British Oxygen at their headquarters in London, and responsible for the co-ordination of their international operations. The research was discussed as a piece of work in the area of organizational analysis, with an emphasis on the behavioural rather than the more commonly-encountered technical aspects of work. The atmosphere of the negotiations was one of friendly curiosity by both parties. It could also be described as open-postured on both sides, for I did not reveal my increasing disquiet with the methods I had already used. No pre-conditions were laid down by the Hong Kong or London company in terms of the methodology to be used, or certainly of any results which were sought. My position was that I was eager to explore the presence and nature of the four dimensions already described, but that the essence of the approach was to allow the principal actors to speak their lines with the minimum of prompting, rather than to respond to the pre-set formula of the questionnaire.

In entering into the second phase of negotiations with this multi-national organization, I was demonstrating a disappointment, which had increased over the years of involvement with a number of organizations, with the adequacy of a positivist approach in the evaluation of the contribution of key people in the organization. At the heart of this disappointment was a feeling that the approach of the questionnaire leading to measurement was wanting in two important respects for the task I had set for myself:

- a) the questionnaire by definition establishes concepts for response which are not necessarily there in the mind of the respondent: it sets up the values which are deemed to be important to the creator of the questionnaire. It is possible that the respondent may not understand or may disagree with the concept at hand, and will be frustrated in giving a forced response to what may be seen as a false or irrelevant premise. This danger is less in dealing with material things.
- b) the questionnaire is a more suitable instrument for assessing factual tangible elements. It is much less powerful in coming to terms with the nuances of human interaction and a person's spontaneous response to a situation. The questionnaire would seem to be at its most vulnerable in dealing with the terrains of beliefs, values, and cross-cultural influences at work in the organization, where individuality has full rein and where the richness is tapped more readily by interpreted encounters than by the standardized measurement.

The research as presented.

The first part of the evolving research pattern which followed was necessary to cover the time scale of involvement and the setting of the company within its markets and society. An attempt is also made to show how the structure and accountability of the key personnel in this organization changed in the period in which contact was made. In Chapter 2, the organization is thus identified, with its personalia, products and markets, together with the way that the accountability and power positioning of key personnel developed during this time. In particular, power positioning is singled out for

attention during the time of transition by the use of the concept of "peer perception" or the relative evaluation of the power and influence as seen by colleagues amongst the senior executives of this organization. Whilst this exercise might be seen as an involvement in organizational politics, the spirit at the time of the involvement was that of seeing the relationships between the senior executives as symbiotic or a continuous state of mutual adjustment between different parts of the structure, generally for the benefit of the organization as a whole.

The main body of the work was then progressed using for each of the areas of curiosity a coupling which involved on the one hand a discussion of major ideas expressed in the area (heavily reliant on the literature developed in the area) with the direct fieldwork of discussion with the seven key managers of the relevance of the dimensions from the position at which they stood. The purpose of this juxtapositioning was to help me as the writer, and hopefully the reader also, to locate the fieldwork being undertaken within the "climate of thinking" referred to at the very beginning of this work. Ideas emanating from the literature were not used in discussion with the principal actors in any way to condition their thinking or responses. It was indeed refreshing that the subjects of the fieldwork could be described as relatively "untainted" by the literature with the multiplicity of methodological disputes which litter the ground occupied by social scientists. In contrast, as the initiator of the encounters, I was no "tabula rasa" in terms of the research, for I was bringing with me a long, if somewhat ill-co-ordinated, series of experiences in the field, and it was recognized

that this influence could not be erased in the formulation of propositions for response in the fieldwork. The purpose of the fieldwork was to look at the set of perceptions through the eyes of the actors in the role that they played, to contrast perceptions of agreement and different view, and to locate the actors within the "climate of thinking" of this organization.

The discussion in Chapter 3 is concerned with a definition of power and authority, which are the bases on which the organization has been constituted in the first place and sustain it subject to the meeting of organizational objectives, such as market share and profit in this case. This power is examined through its different levels of operation from society, through the organization to the individual in a position of authority, but also in its informal as well as its formal usage. The phenomenon of power is looked at not only as a philosophical concept, but as a practical ideal, and the necessary backcloth to our viewing of the way the principal actors in this organization conceive the basis of power for what they do.

The fieldwork in Chapter 4 is necessarily linked to its predecessor, for in it the perceptions of power and authority are tapped from amongst those who possess it in greatest measure in this organization. Power is recognized as possessing qualities which are difficult to define, containing elements of the legitimate, the informal, the mandatory, persuasion, methods of communication, timing and relative positioning of the person in the organization, amongst a variety of its possible properties. The simplistic conclusion that power is synonymous with the results which it achieves has been avoided in order that the ends are not confused with the means. On

the other hand, the effective use of power must be related to achieving outcomes whether this is done through the legitimacy of appointment or through skills displayed in interpersonal conduct.

The control of what is happening within the organization is examined in Chapter 5 as the corollary of power and as a phenomenon in its own right. Many writers have taken the view that control is the most fundamental of all tasks that managers undertake within an organization, and that without it there is likely to be lack of direction or conceivably anarchy. The term has been used variously to cover either the means by which people or situations are dealt with, or the end product of control. Apart from its close association with power in different forms, and its identification as one of the structural and interpersonal tasks of those who manage in an organization, control can also be seen as a social and political phenomenon in a given society, as part of the "rules" laid down for conduct. The sequential relationship between power and control is further underlined by the recognition that society has its part in their creation not only through the legal basis for establishing organizations, but in the process of legitimization in the Weberian sense and in the particular forms that customs and practice take in a society.

The notion of control is taken in Chapter 6 into the arena of those who are most closely identified with it in Oriental Gas Products. The actors are given rein to portray as they exercise it through their managerial positions. Control has within it elements of the mechanical and as an effect of interpersonal relations. The specialist nature of managerial work undertaken may to an extent

condition the mechanical areas of control. However, there appears to be a considerable scope for the imprint of the personality of the manager in the way control is exercised. The need to seek compliance from amongst the work-force who are controlled is acknowledged, but rarely articulated in the organization, as too are the special contingencies which may make a situation unique and not susceptible to a standardized formula of management.

Our attention is focussed in Chapter 7 on the setting of the organization in its various environments. Organizations are examined as vehicles of information and decision initiatives, continuously transacting with their environments. Factors inherent in a particular environment may affect the way an organization goes about its task and organizations may in return shape and influence their environments. The climate under which an organization operates is initially selected when the organization is created, but may over time be modified. The normal response pattern to a changing environment is for the organization so to constitute itself as to arrange for adjustments to be made internally in circumstances where the organization cannot, or does not wish to, change its environment.

The nature of environments is considered in Chapter 8 through the perspective of the principal actors. The actors confront their environments in a number of different guises - as individuals, organizational members, managers responsible for a specialized area of management and from different standings of power within the organization. Their behaviour may be pro-active or reactive to the settings in which the organization is operating. Whatever the emphasis, environments constitute a vital area of challenge and

conditioning to the constituent member of an organization.

The role of cultural influence is considered in Chapter 9 with respect to this multi-national organization. Oriental Gas Products is the result of an investment decision by two European companies in a fundamentally Chinese setting. It is a capitalist concern, working close to the territory of the largest commitment in the world to state-owned enterprises. Its managers are British, French and Chinese, and it is also suggested that the organization itself has a "corporate culture", influenced by the "way things are done" in associate companies to Oriental Gas Products throughout the world. The reason for including cultural factors alongside, perhaps even as part of the environment, is that the principal actors are each products of widely differing cultural backgrounds which are not erased when an individual joins a working organization. The impact of culture on cognition and perspectives may vary between people and situations, but in such a rich international setting as was provided by Oriental Gas Products it seemed more prudent to assume in the first instance that it was present in some form, rather than to declare that it was absent or totally irrelevant.

CHAPTER 2

ORGANIZATIONAL CHANGE AND DEVELOPMENT

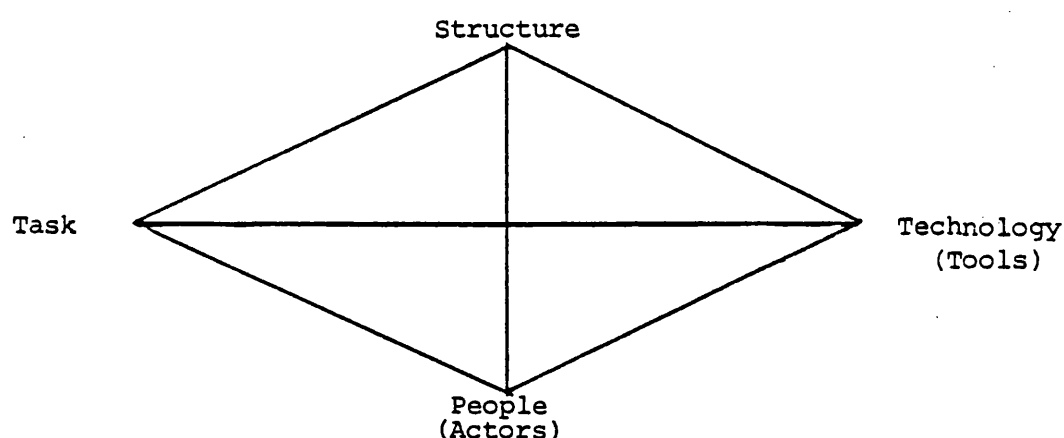
Oriental Gas Products is an organization set up in 1962 in a British colonial territory as a result of a joint venture agreement of equal shares between the leading British and French manufacturers and distributors of industrial and medical gases. Its major products in order of importance are Oxygen, Nitrogen, Argon, Acetylene, Hydrogen, Helium, Carbon Dioxide and Nitrous Oxide, together with a range of special gas mixtures, calibration gases and chemical and rare gases. It also provides the hardware for its products, including cylinders and tanks for storage, welding and cutting equipment, medical equipment and complete pipeline installation. By any standards it is a relatively small organization, employing 330 people when research enquiries were initiated by the writer in 1980 and just under that figure when formal contact was completed in 1984. The company enjoyed a monopoly position allied with steady growth in first twenty years of its existence. In recent years, however, two factors have emerged to alter the position:

- a) The loss of a monopoly trading position. Two competitors have emerged in the fields of industrial oxygen, acetylene, argon and carbon dioxide accounting for some 15% of the market locally.
- b) The opening up of business with Mainland China, serving offshore oil requirements, and special gases and equipment in industrial areas. There was no such trade in 1982, but by 1984 several million dollar's worth of business was being done, mainly in the neighbouring Guangdong Province, on a joint venture basis.

It is important to note that production of oxygen and related gases is essentially a "localised" industry with little or no export potential except in the movement of the hardware associated with the gases. This phenomenon is relevant to the nature of organizational-environment relations. The "core" operational activities of the organization are classically established on the basis of a majority of the workforce in the production activities acting in response to the forward planning of orders through the sales and marketing areas. By its very nature the gases industry lends itself to the establishment of consistent, repeat pattern business for the bulk of its sales which is extended by new order opportunities, which in turn is largely a reflection of the industrial and medical developments in a community. The advent of a recession, which was evident in the time period of research interest in Oriental Gas Products, had a marginal effect on the trading position of the organization.

The perspective from which the change and development in the organization of Oriental Gas Products is viewed was originally expressed by Leavitt (1964). His model expressed the interaction between the major forces contributing to change in the organization, as well as those affected by such change:

Table 1. Major Variables in Organizational Change and Development



Structure is defined as the workflow of the organization, embracing systems of authority, power, information systems, co-ordination and communications. Task refers to the objectives of the organization. Technology includes the equipment, plant and buildings necessary to achieve the task. People are seen as actors in the enterprise, embodying attitudes and expectations, with a script which is partly worked out in the terms of their appointment and partly modified in daily interaction with other people. Conventionally, the definition of structure and people is summarized in an organization chart, allied with job descriptions and the pattern of interaction between groups. It is tempting to use the four elements in the model as characterising the nature of the organizational reality in a static sense, without taking into account the extent to which the forces initiated and received by the variables change over time. The time dimension is taken into account in this research into Oriental Gas Products insofar as the organization is considered over a four year period with the major shifts in emphasis located in 1980, 1982, and 1984. A notion which is central to the analysis of the organization over this period of time is that where a variable is seen to be relatively constant, it is deemed to have had a commensurately small influence as an initiator of change or as a receptor of change influence. The shorter the time span considered the more likely it is that changes may occur which challenge this notion; the longer the time span, the more lasting effects of change in relationships will be apparent. During the three time stages selected for the analysis of the organization the variables of Task and Technology remained remarkably stable. The sale of gas and related products grew slowly and steadily during the four

years in question, implying little volatility in the two variables most closely associated with the organization's environment. It is, therefore, in the area of interaction between the people (actors) and the structure that our attention will be focussed.

The organization of Oriental Gas Products is addressed in successive stages by means of a modified version of a classification used by Sayles (1964).

Table 2. Inter-Departmental Relations and Task Dependence.

External Relations of Managers	Organizational Process	Department Concerned	Nature of Task Dependence
1. Work flow in successive stages	Operations	Production	Successive interdependence
2. Trading: arranging to sell goods and services	Operations, System main- tenance or facilitation	Marketing Distribution	Interdependence
3. Service: supplies services or support	Facilitation, system maintenance	Engineering	Interdependence with clients producing co- dependence with them
4. Advising and consulting	Facilitation	Personnel	Interdependence with clients producing co- dependence with them

5. Auditing: evaluating or appraising the work of other groups	Performance control	Finance	Interdependence with subjects producing co- dependence with them
6. Stabilizing: limiting or control- ling others' decisions in accordance with policies	Performance control	Finance	Interdependence with subjects producing co- dependence among them

Sayles includes a further class of external relations - innovating - which is not mentioned since Oriental Gas Products undertakes none of its original research and development; it draws upon the fruits of research from the British and French parent organizations.

The process of organizational change and development in Oriental Gas Products is examined by means of four variables which interact with each other over a time frame of three points of investigation spanning a five year period. The variables may be discussed briefly grouped under the following headings:

Processes There were six separate work groups which were accountable to the Managing Director. Using part of the classification of activities adopted by Sayles (1964) and Hutton (1969), these work units were described in Table 2 as being involved variously in the processes of goal achievement and system maintenance, as well as boundary management. Amongst the four variables under consideration, the processes changed least of all, with a slow and steady increase in productive

and marketable facility and the workforce remaining quite stable.

Levels. For the purposes of the research, levels were defined as the Managing Director and those people deemed by the organization to be managerial and reporting directly or indirectly to him. In certain cases managers represented functions directly, in other cases managers appeared in a supernumerary capacity responsible to the Managing Director for other managers and their functions. Including the position of the Managing Director, these levels rose from two in 1980 to three respectively in 1982 and 1984.

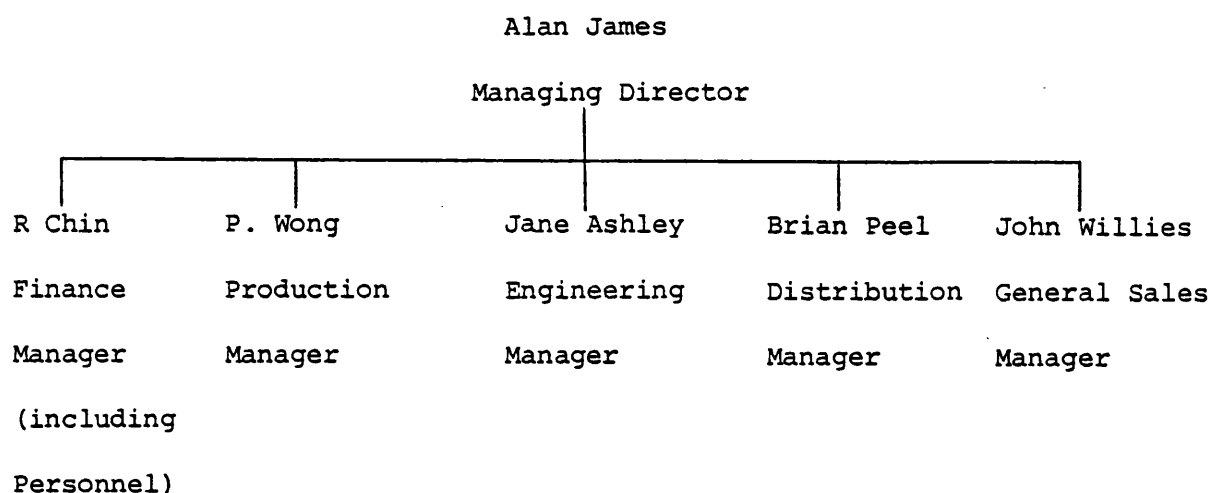
Areas. Under the two broad areas of work and conditioning effects four areas form a focus of the research through the perceptions of the principal actors of how they contribute to organizational change and development. Work is seen as an effect of two factors - the power or authority to undertake work and make changes; and control, which is its logical corollary, to ensure that things are carried out. The conditioning effects are perceived as the effect of the environment, which for our purposes includes technology as imported to achieve the task, and cultural factors which are considered in the light of English and French investment in an organization contiguous to China and with management representatives from each of the three areas. Perceptions of these four areas and possible links with the development of theoretical ideas from other sources are considered in later chapters.

Symbiosis and Peer Perception. The biological term symbiosis is used to denote "a mutually beneficial partnership between organisms of different kinds", which is considered to be an appropriate description

for the work units observed over a period of time. They were "different" in the sense that they followed out different systems of work and on some occasions different priorities, as well as experiencing the kinds of boundary disputes which are an ordinary part of organizational activity. In a purist sense, the network of symbiotic relationships can never be revealed in organizational analysis over a period of time by an outside observer since roles are being acted simultaneously by the key players and, indeed, the presence of an observer may interfere with such relationships. One of the features of the relationships is the standing and influence which the actors in the organization ascribe to others of a managerial level and for this the term peer perception is used. If we accept that in all but the most unusual circumstances the Managing Director will be seen to have the greatest influence on the affairs of the organization, we may ask what causes the relative standing in the eyes of peers who are accountable to the most senior person.

When the organization was first encountered in 1980, there were six identifiable groups of work, each forming a sub-system, with two of them (finance and personnel) joined for administrative purposes. Thus, the organization chart of activities directly accountable to the Managing Director was as follows:

Table 3. Organization chart in 1980 (330 employees)



This chart is characterized as one of "open accountability" of the various functions to the chief executive, with prima facie no distinctions in rank or grouping by function. Comparison of the definitions applied in Tables 2 and 3 reveal a close association of the functions with two of the major processes described by Hutton (1969) as goal achievement (operations, control and facilitation) and system maintenance (design, resources, and maintenance of performance). The balance between these two thrusts in organizational activity, and a process in its own right, has been referred to in the same context as boundary management. This term relates to the dynamic of goals and tasks set for the organization, bringing in the throughput of materials, demands, constraints and resources arising from forces in the environment (markets, competition, finance, material, technological, social and legal) and the forces at work within the internal organization.

It is a practice common throughout much organizational analysis not to mention the names, age, gender or ethnic background of the principal actors in the organizational drama. In this particular case, all names are fictions. However, they do accurately reflect the gender and ethnic background of the senior managers who are accountable directly to the chief executive of Oriental Gas Products during the four year period of transition in question. The purpose of "personalising" these elements in the organization structure is to pose the question of the relevance of the individual in all his or her different facets as a factor in organizational change in comparison to the more normal process of ignoring personalities in defining the

major processes and areas of the organization. It always has been recognized that personalities can have a profound impact on the functioning of an organization, particularly when the person in question occupies a senior position. The dilemma is that the idiosyncratic nature of human beings, as well as the special character of situations between organizations, is likely to draw the researcher away from exploring the behaviour and power positions from a theoretical point of view and point to an approach which could be described as heuristic.

The purpose at this stage is to look at the perspective of three of these variables - process, level, and symbiosis-through three time periods set in 1980, 1982 and 1984. During the periods in question, the managing director changed once after the earliest time and the occupants of all other work units changed at least once, with a grouping of functions which varied considerably at the three stages. Only one of the managers, an english-trained chemical engineering graduate, Jane Ashley, was evident in all three stages of organizational change. The organizational pattern was also affected by the interests of the organizations, jointly British and French, who shared the initial and on-going investment. Their interests were looked after from a joint-venture company in Australia, which was the largest of its kind there and who had appointed a regional manager to oversee and give general policy guidance to Oriental Products Ltd. as part of the Far East Region of their wider organization.

Organizational Change through Processes

During the three time periods in question there were considerable

changes in the ways in which the processes of the organization related to one another, despite the fact that the processes themselves did not change very much. The basic position of alignment in 1980 was stated in Table 3, with the five areas of work responsible for activities as follows:

Finance - accounting, systems, EDP, purchasing and personnel.

Production - gas production.

Engineering - maintenance of plant and equipment, pipeline installation for customers.

General Sales - gas sales, equipment sales, vehicle maintenance.

Distribution - gas distribution, liquid gas delivery, cylinder distribution.

Earlier this type of organization was described as that of "open accountability" in the sense that each component appeared to be on a par with the others, responsible directly to the most senior executive. From the point of view of subsequent developments, the most important features of the situation in 1980 were the organizational grouping of the personnel function within that of finance, and the separate accountability of production, engineering, sales, and distribution. Subsequent re-groupings of these functions by 1982 and 1984 saw the emergence of an intermediate or third level of management.

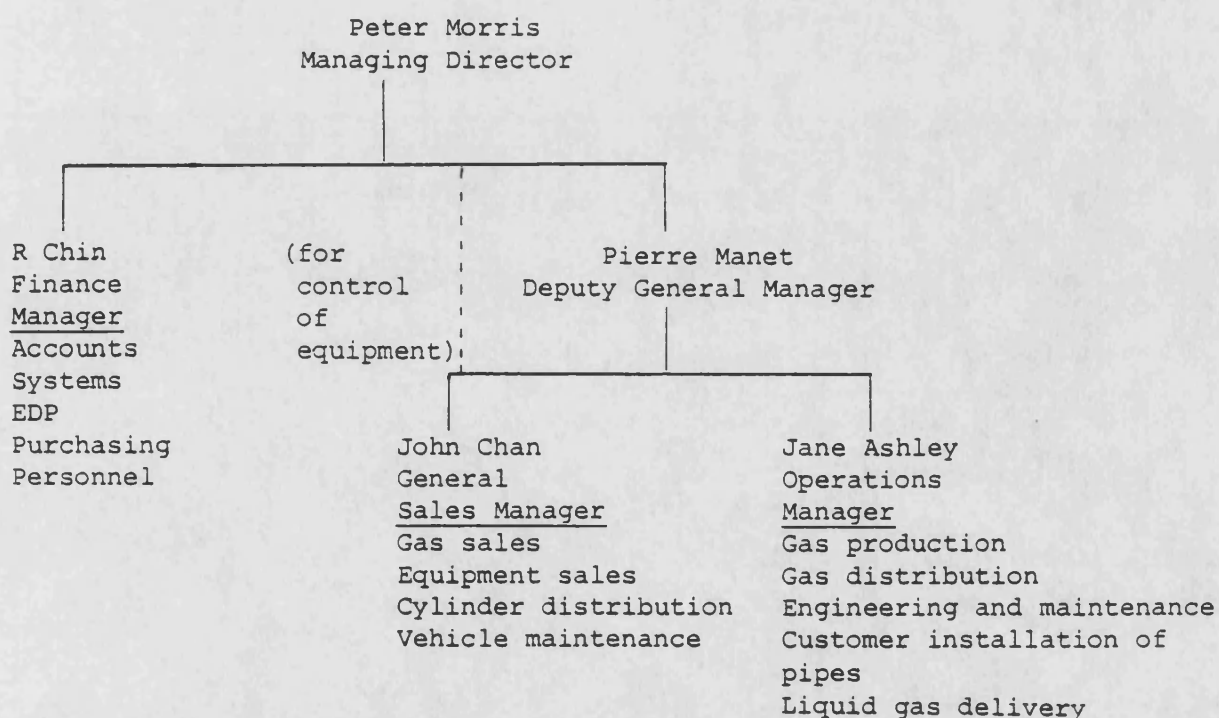
The position in 1982 saw the departure of the distribution manager on retirement and the function split between general sales and operations. At the same time the production manager left to join a competitor and the whole production function was absorbed under engineering and maintenance to become operations. The evidence for the dispersion of the distribution and the merger of production and

engineering during this two year period was not to be seen in any major shift in task or technology, as cited earlier in Leavitt (1964). Indeed, throughout the whole period of contact with this organization, there was a remarkable stability in the nature of the task addressed and the changes in technology could at best be described as an updating or facelift. Given the relative consistency of these two variables, the attention of the enquirer is inevitably drawn to the other two variables - the people (actors) and the structure - and their possible contribution to the reasons for change.

Levels

In 1982 the influence of people on the organization of Oriental Gas Products could be seen most strikingly in the introduction of an intermediate level of manager, who was appointed on the direct mandate of the French associate parent company. Prior to this move a new managing director was appointed from the British parent company. The resultant organization chart was, continuing the practice of fictitious names:

Table 4. Organization Chart in 1982 (330 employees)



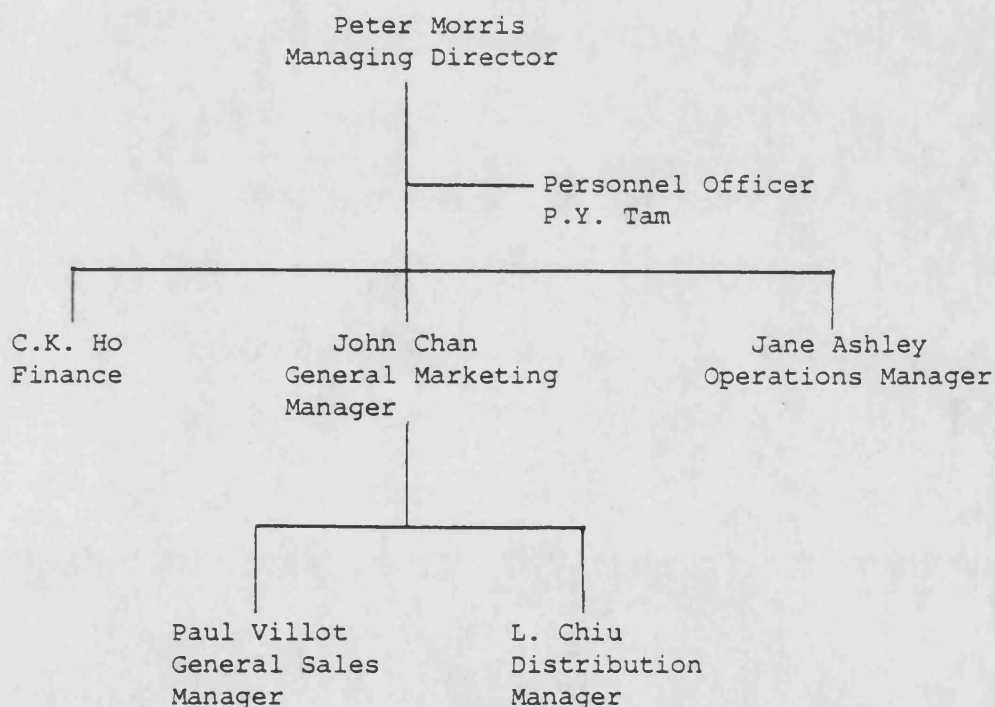
The general effect of this reorganization is characterised as a move towards integration, but bringing with it certain unusual features. In normal circumstances an integration of functions resulting in the reduction of managers accountable to the senior executive from five to two, and the expansion of engineering to embrace production and certain aspects of distribution might be seen to be enhancing for the key personnel concerned. The sales function was also extended to include certain aspects of distribution. In reality, however, the moves in 1982 served to create a highly vertical form of integration by the device of creating a deputy managing director for all functions except finance, personnel and the control of equipment. The somewhat paradoxical result of this organizational change was that the general sales manager and the operations manager were simultaneously granted enhanced status and larger responsibilities in their spheres of responsibility together with being removed one stage further away from the managing director.

The reason for the organizational change appeared to be less concerned with the need to integrate the sales, distribution, production and engineering functions and more directly a reflection of the initiative of the French joint-owning parent company, who brought in Pierre Manet to represent their interests. In other circumstances, the creation of an important underpinning manager to the managing director may have been interpreted either as a move to relieve pressure from the most senior executive or as a developmental move for the deputy managing director. There was no evidence that the events or the personalities supported the first of these possibilities; the second also appeared to be irrelevant since no succession was involved and Peter Morris remained as managing director until 1984, when the first Chinese

managing director was appointed. It is perfectly legitimate for a joint parent company to wish to involve itself in the functioning of an organization in which it has invested a considerable amount.

By 1984 the organizational situation in Oriental Gas Products had changed again, influenced largely by the departure of the deputy managing director, Pierre Manet, back to his parent company in France. Whilst there had been undoubtedly a form of relief of pressure for the managing director during his tenure of post, it turned out that there was no succession.

Table 5. Organization chart in 1984 (320 employees)



Each of the three time phases of organizational change outlined in the research has been endowed with a different character. The 1980 position was described as one of "open accountability" because of the

direct relationship of the work units to the most senior executives and the absence of any intermediate level of management. The "integration", which was evident in the changed structure of 1982, was largely brought about by the insertion of an intermediate manager drawing together the major areas of production, distribution and sales. By 1984 the process of structuring had moved in another direction which may be described as a state of "qualified differentiation". The degree of integration evident at the earlier stage of re-organization was still present with an intermediate level of management responsible for the general marketing areas of sales and distribution. Unlike the previous appointment of Pierre Manet at this level with broader responsibilities, it was clear that the nomination of John Chan as the co-ordinating head of marketing functions was also intended to be a developmental move which eventually led to his nomination as managing director early in 1985. He was also the first Chinese Manager to have been appointed to the most senior position in the organization by the joint British and French interests.

The qualified differentiation became apparent in the structure by the separation out of operational activity (gas production, some distribution, engineering and maintenance) directly accountable to the managing director and the emergence of the personnel function from under the wing of the finance manager, being made directly accountable to the managing director. The interests of the joint French-owning company were also retained by the appointment of Paul Villot as general sales manager accountable to the general marketing manager, thus retaining the three tiers of management which had emerged in 1982.

Symbiosis and Peer Perception

The organization structure of Oriental Gas Products was seen develo-

ping from time to time over a period of nearly five years. The principal actors, defined for our purposes as those of managerial rank close to our accountable to the most senior executive, changed considerably during this time: only one manager served consistently through the three major organizational changes. Over the time period, the researcher could at best be described as an occasional visitor. Even if it were possible to have been immersed in the organization structure on a permanent basis, it is doubtful if all aspects of what has been described as the symbiotic relationships between the actors could ever be witnessed. A further caveat needed to be observed insofar as it cannot be measured how much the presence of an observer inhibits the actors or conditions certain behaviours which may not be typical of the long term pattern of relationships.

A central area of curiosity developed during the time of contact with Oriental Gas Products, which was concerned with the reasons why the organization changed as it did. In the broadest sense, organization was seen to change and develop for one of two principal reasons:

- change resulting from managerial decisions at a senior level within Oriental Gas Products or from the parent investing organizations, reflecting the prerogative of senior managers to group around personalities or functions, or perhaps the outworking of organizational politics.
- change resulting from what might be described as third party influence, including the environment, the market or technology.

In terms of the second of these reasons, it has already been noted two of the variables described by Leavitt (1964) - task or the

objectives of the organization, and technology, including equipment, plant and buildings, both changed remarkably little in the five year period. The overall workforce varied between 310-330 employees, the lower figure representing the target figure for 1984. Whilst gas production, together with profitability, rose gradually during the period, improvement in plant and equipment took place slowly. The most significant external impact on Oriental Gas Products trading position took place between 1980-84 with the growth of sales and joint venture activity with China, representing some \$10 million in turnover at the latter date. Whilst the nature of the task and the technology may have conditioned the organization and internal relativities in the first instance, there was no evidence from direct observation and discussions with the principal actors that these two variables were conditioning factors to any large measure in the organization change which took place.

The implication of the relatively static nature of task and technology was that attention was drawn to the roles of people and the structure as possible causal links in the chain of events. Over the period of time studied, the organization of Oriental Gas Products developed through two processes which bulked large both on observation and through the eyes of the principal actors:

- a) Three deliberate changes in structural accountability, approximately two years between each, which altered the relative positioning of major work areas in the structure, and which to a point reflected the exercise of power by the investing organizations. These changes were most clearly signalled by the personality and placement of key actors.

b) The continuous process of symbiosis, which has been described as a mutually beneficial process between organisms of different kinds. This term, normally associated with biology, is used to denote the mutual adjustment between different parts of the structure which was continuous in the organization.

The second of these processes took place within the context set by the first. Symbiotic relationships were a mixture of formal and informal links which took the organization forward. It was customary for the managing director to hold weekly meetings with each of the managers directly accountable to him to review the current state of the organization and to set the formal pattern of relationships. This weekly pattern was supplemented by one-on-one meetings with the individual functional managers. The true nature of symbiosis then became apparent with the development of cross-relationships on an ad hoc basis between the individual managers. In certain cases there were logical groupings to the pattern, such as that between production and engineering, sales and distribution, finance and every other unit. The insertion of a third level of management - a deputy general manager in 1982 and a general marketing manager in 1984 - inevitably served to formalize the nature of these symbiotic relationships in the areas over which they had authority. Over any given period of time the number of interactions between managers was considerable and their nature and form such as to defy classification, except that they were concerned with the functional aspects of the work units which the manager represented. They were acts of mutual adjustment, initiated by any one of the managers, which largely passed and sought information as a supplement to the more formal symbiosis which emerged from meetings.

As would be apparent in any group of creatures indulging in symbiotic relationships, the performance, style and relative power position of the other actors was noted by peers. During the period under review the managing director was consistently ranked by all the managers in the second and third rank as possessing and exercising the power which one would expect from a person in the prime position in an organization. In most concerns this reflection of authority would be unremarkable. More informative was the ranking of peers in the second and third rank of each other in respect of the power and influence which they held in causing change in the organization. The phrase "peer perception" was coined to describe this process. Peer rating was elicited from discussions with the key actors in Oriental Gas Products over the three major organizational changes and by a ranking in response to the question "how much actual say or influence does manager X have in the running of your organization?" The difficulties in asking such a question which went to the heart of organizational politics, possibly tapping inter-personal rivalries on the way, were readily apparent. In view of this uncertainty of absolute proof, the ranking was not treated as an instrument of statistical precision. However, the results are offered in view of the high degree of agreement on ranking of second and third level managers. In all three time samples the managing director was rated as having most influence on organizational affairs.

Table 6. Ranking of perceived influence and authority by peers.

<u>1980</u>	2nd - General Sales Manager
	3rd equal - Finance Manager
	3rd equal - Distribution Manager
	5th - Production Manager
	6th - Engineering Manager

1982 2nd - Deputy General Manager

3rd equal - General Sales Manager

3rd equal - Operations Manager

5th - Finance Manager

1984 2nd equal - General Marketing Manager

2nd equal - Operations Manager

4th - Finance Manager

5th - General Sales Manager

6th - Distribution Manager

7th - Personnel Manager

The effects of power grouping with the appointment of an intermediate level deputy general manager in 1982 and a general marketing manager in 1984 are reflected clearly in their perceived influence by peers in the latter two stages. From a functional point of view, the balance of power moved from a grouping of the commercial areas - sales, finance and distribution - through the integration evident in 1982 to a situation in which the enlarged fields of marketing (sales and distribution) and operations (production and engineering) shared equal esteem in terms of influence. The personnel function emerged in its own right by 1984 accountable directly to the managing director. However, it was made clear by the managing director that the standing of the personnel manager as well as that of the distribution manager in no way compared with that of their peers in 1984.

Peer perception gives us an insight into the patterns of change in the relative positions of power and influence. It is an imperfect tool in so far as the process itself may not be immune from those very influences which it seeks to tap. However, such fears were to a degree

mitigated by the high degree of consensus expressed individually by the managers about their peers during each of the three periods of organizational shift. It was mentioned earlier that a primary cause of organizational change was the prerogative of senior management to re-group functional activities for the purposes of effective operation and communication. Whilst this was obviously the case in the eyes of the managers discussing their perception of peers, there emerged another factor which was seen to be complementary in changes to the prerogative of management decision - the experience, personality and general "standing" of the key actor within the organization.

It is a truism that organizations do not change and develop according to pre-ordained or even predictable circumstances. At the same time, a definition of the phenomenon of change in an organization cannot be avoided altogether by resort to the conclusion that everything that happens "is contingent". A clue to the forces at work which influenced change at Oriental Gas Products is given by the almost static nature of a major variable - the environment, which may be said to embrace both the technology, the markets and the society in which the organization works. Some authors, notably Woodward (1965) and Pugh and Hickson (1976) have placed a major emphasis on the role of technology in formulating the organization. In doing so, they have stressed the technical and physical phenomena and reduced the importance of interpersonal relations and the working of organizational politics. Both sets of authors were also little inclined to search for a lengthy time dimensional element in their studies of organizations and to track the changes in the influences leading to development.

The changes which occurred in the organization of Oriental Gas

Products were most strikingly portrayed in the structure, which in a five year period moved from the open accountability of the principal actors to the most senior manager, through a form of integration to a situation of qualified differentiation. A major deduction from the successive encounters with this organization was that a prime motive force for change emerged from human rather than physical factors, in an arena which may be described as organizational politics. There were two distinctive elements at work in this political arena:

- a) The interests of the parent investing organizations, represented by the appointment of key personnel at the managerial level. Throughout the whole of the period of research contact with the organization the chief operating executive was British. Successively, two French managers were appointed at the second and third lines of management. Externally, the interests of Oriental Gas Products came under the eye of a regional manager based in Australia, working for an organization which was 50% owned by the British parent company and 50% by Australian interests.
- b) The experience and personality of senior managers also emerged as a factor in change, as was detected in the process of peer perception. The scripts which the principal actors spoke, and the weight of authority which they carried, reflected more than the positions of power which they occupied in the organization. There was an interplay between the personalities involved, the experience of their specialism, and their power position which contained elements of both cause and effect. The situation of the only woman in the managerial ranks, Jane Ashley, illustrates the way in which a combination of experience, personality and functional grouping can

over time have a considerable impact on the organization. In 1980 she was responsible for the engineering and maintenance function when, together with the production of gases, it was rated most lowly by peers in terms of the influence it could command. Over the next five years she emerged as the most experienced manager with consistent service in Oriental Gas Products, heading the integrated functions of production, engineering and maintenance, ranked second equal in power and influence with John Chan, who was ultimately to emerge as the chief executive. An equally strong pointer to the influence of personality as compared with the intrinsic nature of the function in the organization was the reduced standing amongst peers of the finance, sales and distribution activities in the years following 1980.

The intricate web of organizational politics in Oriental Gas Products displayed patterns of influence through institutional interests and personalities which might not be matched by other organizations, even in the same industry. An interpretation of organizational activity will never be complete if these elements of power, control and inter-personal relations are ignored. On a day-to-day basis the working of these elements together was characterized as symbiotic, in the sense that a great deal of mutual accommodation had to take place after the major shifts in inter-personal relations which typified the style of organizational change in Oriental Gas Products. A comparable and equally gradual effect on change was evident in the development of the processes, including production, the technology and the markets which they served.

POWER WITHIN AND WITHOUT THE ORGANIZATION

The exercise of power in organizations is a subject of abiding interest: it cannot easily be discounted or ignored. In some way or other the emergence and use of power is described widely in the novels and plays of literature, as well as in the social sciences. Like love, power is a word used continually in ordinary speech, understood intuitively, but rarely defined. And yet, if we explore the meaning of the word ranging from philosophical thought to the macro and micro aspects of the social sciences, it is quickly discovered that power may have conterminous descriptions, such as authority, influence and compliance, or its outward manifestation in terms of control, rule and domination, or as organizational politics. This range of focal points makes power a difficult concept to grasp in all its aspects and levels at the same time. The complex nature of power and its outworkings has led to expressions of frustration. March (1966), writing on the question, concluded that "on the whole power is a disappointing concept". Martin (1971), arguing as a philosopher, declared "theorizing about power has often been confusing, obscurantist and banal".

The organization is seen as an open system, which exists by exchanging materials with its environment and by importing materials, transforming them, consuming some of the products for internal maintenance and exporting the rest (Miller and Rice, 1967). Within this context, power may be perceived as operating within the task system (the system of activities together with the human and physical resources required to perform activities) and the sentient system (that system or group that demands and receives loyalty from its members and on which individuals depends for emotional support). Influence, power and one

of its derivatives, authority, are seen as important elements at work in both the task and sentient systems. They appear variously to be invested in individuals, positions in the organization, groups both formal and informal, as well as in environmental factors which affect the organization. It is further conjectured that power influence and authority may be exercised explicitly or implicitly and that their potency may vary over time between people, positions and groups. Such variability caused Dahl (1957) to admit to two "suspicions" arising from his ruminations about the concept of power. First, "if so many people at so many different times have felt the need to attach the label power, or something like it, to some Thing they believe they have observed, one is tempted to suppose that the Thing must exist; and not only exist, but exist in a form capable of being studied more or less systematically". Second, "a Thing to which people attach many labels with subtly or grossly different meanings in many different cultures and times is probably not a Thing at all but many Things." He concludes that for many social scientists the study of power and influence has proved to be "a bottomless swamp".

In approaching the swamp I shall use the term "power" in its general sense covering the other terminologies mentioned, except where a specific attempt is made to single out the separate characteristics, on the assumption that it is preferable to be less precise in definition in developing an argument than to lose the sense of the argument completely in a welter of sub-definition. Although there are numerous areas of overlap in the debates, the approach of the various writers on power can be divided very broadly into four camps:

- a) Those who see the subject as an aspect of philosophical discourse, such as Martin (1971), Lukes (1974) and Wrong (1979).

- b) Those who deal with power primarily in the context of society and the state, writers such as Weber (1948), Blau (1956), Dahrendorf (1968), Dahl (1961), Parsons (1967), Marx (1973), and Giddens (1968).
- c) Those who are concerned with the exercise of power in the context of an organization, for example Mechanic (1962), Lammers (1967), Crozier (1964), Pettigrew (1973), Clegg (1979) and Bacharach and Lawler (1980).
- d) Those whose interest in power centres on the individual and interpersonal psychological aspects which are evident, including the strategies and skills employed, such as French and Raven (1959), Etzioni (1964), Zaleznik (1970) and Mangham (1979).

A great deal of the debate has centred upon the concept of power which is often expressed in the literature by the words "the ability to....." or "the ability to bring about the outcome you desire" (Salancik and Pfeffer, 1977). This is not normally seen as an ability which is innate in the person but rather as an effect of the relationship between: individuals, groups, organizations or classes, which enable A to get B to do something. Dahl (1961) was one of the earlier writers to develop his "intuitive idea of power" in the following terms: A has power over B to the extent that he can get B to do something that B would not otherwise do. Dahl was one of a number of American political scientists who were influenced by the work of Weber (1948). In most general terms, these writers advanced the view that power in the American political scene is distributed pluralistically, or emanates from a diversity of interests involved in decision-making resulting ultimately in acts of political will. Dahl approached the problem of power by defining the need to "determine for each decision which parti-

cipants had initiated alternatives that were finally adopted, had vetoed alternatives initiated by others, or had proposed alternatives that were turned down". These actions were then tabulated as individual "successes" or "defeats". The participants with the greatest proportion of successes out of the total number of successes were then considered to be the "most influential". In this case the pluralist approach characterized by Dahl, based on concrete, observable behaviour, attempts to study specific outcomes in order to determine who actually prevails in community decision-making. This approach is characterised by Lukes (1974) as a one-dimensional view of power, involving a focus on behaviour in the making of decisions on issues over which there is a conflict of (subjective) interests, seen as express policy preferences, revealed by political participation.

In their critique of the one-dimensional view of power, Bachrach and Baratz (1962) argue that it is restrictive. Whilst agreeing with the central focus of the pluralists, they extend the definition by saying: "Of course power is exercised when A participates in the making of decisions that affect B. Power is also exercised when A devotes his energies to creating or reinforcing social and political values and institutional practices that limit the scope of the political process to public consideration of only those issues which are comparatively innocuous to A. To the extent that A succeeds in doing this, B is prevented, for all practical purposes, from bringing to the fore any issues that might in their resolution be seriously detrimental to A's set of preferences". In the words of Schattschneider (1960) "All forms of political organization have a bias in favour of the exploitation of some kinds of conflict and the suppression of others, because organization is the mobilisation of bias. Some issues are

organized into politics while others are organized out." By adding a second major dimension to the typology of power, Bachrach and Baratz embraced not only the use of coercion, but also influence, authority, force and manipulation. Coercion, as we have seen, exists where A secures B's compliance by the threat of deprivation where there is a conflict over values or course of action between A and B. Influence exists where A, without resorting to either a tacit or an overt threat of severe deprivation, causes B to change his course of action. In a situation involving authority, B complies because he recognises that A's command is reasonable in terms of his own values - either because its content is legitimate and reasonable or because it has been arrived at through a legitimate and reasonable procedure. In the case of force, A achieves his objectives in the face of B's noncompliance by stripping him of choice between compliance and non-compliance. And manipulation is thus an aspect or sub-concept of force whereby compliance is forthcoming in the absence of recognition on the complier's part either of the source or the exact nature of the demand upon him.

Whilst recognizing that the two-dimensional view of power represented a major advance over the one dimensional view by its recognition of the way that decisions are prevented from being taken on potential issues of conflict, Lukes (1974) advanced a number of criticisms of the earlier positions. He claimed that they were too committed to a behaviourist stance - that is, to the study of overt, "actual behaviour", in which concrete decisions are seen to be of great importance. Moreover, he states, the bias of an organizational system is not sustained simply by a series of individually chosen acts, but also, most importantly, by the socially structured and culturally pat-

terned behaviour of groups, and practices of institutions, which may indeed be manifest in an individual's inaction. He was questioning the need for power to emerge from the probability of individuals realising their wills and the insistence on actual and observable conflict before power is exercised. Put in terms of the analogy already used, Lukes' three-dimensional view of power added an important criterion to the earlier versions: A may exercise power over B by getting him to do what he does not want to do, but he also exercises power over him by influencing, shaping, and determining his very wants. Indeed, is it not the supreme exercise of power to get another or others to have the desires you want them to have - that is to secure their compliance by controlling their thoughts and desires? It is not necessary to enter Huxley's "Brave New World" or the world of B.F. Skinner to see that the most effective and insidious use of power is to prevent the kind of conflict described by the pluralists and Bachrach and Baratz from arising in the first place.

The distinctive features of the three views of power presented above are summarised below:

One-Dimensional View of Power

Focus on (a) behaviour

- (b) decision-making
- (c) (key) issues
- (d) observable (overt) conflict
- (e) (subjective) interests, seen as policy preferences revealed by political participation.

Two-Dimensional View of Power

(Qualified) critique of behavioural focus

Focus on (a) decision-making and nondecision-making

- (b) issues and potential issues
- (c) observable (overt or covert) conflict

- (d) (subjective) interests, seen as policy preferences or grievances

Three-Dimensional View of Power

Critique of behavioural focus

Focus on (a) decision-making and control over political agenda

(not necessarily through decisions)

(b) issues and potential issues

(c) observable (overt or covert) and latent conflict

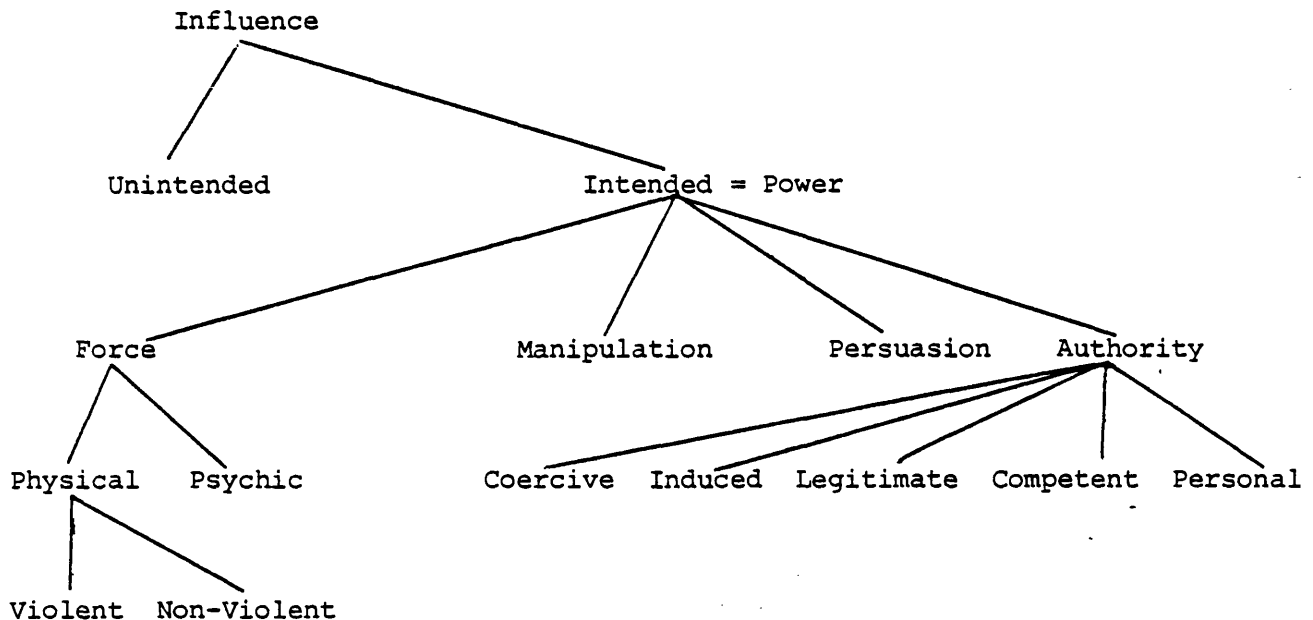
(d) subjective and real interests

It is difficult to avoid the conclusion that each of these dimensional views stems from a more fundamental position adopted towards the individual and the organization. Lukes takes the view that the One-Dimensional View is essentially liberal: taking men as they are and applying want - regarding principles to them, relating their interests to what they actually want or prefer, to their policy preferences as manifested in organizational participation. The Two-Dimensional View is seen as reformist: seeing and deploring that not all men's wants are given equal weight by the system and recognizing that their interests may be revealed by indirect, deflected or concealed wants and preferences. The Three-Dimensional View is essentially radical: maintaining that men's wants may be themselves a product of the system which works against their interests.

Wrong (1979) draws together a number of strands evident in earlier debates in his attempt to develop a comprehensive model embracing power and authority each with a number of sub-types. In defining power as the capacity to produce intended and foreseen effects on others, he avoids the equation of power with the ability to impose

sanctions. Power is characterized as a special case of influence, namely intended as opposed to unintended: and authority as a special case of power.

Figure 1



Wrong distinguishes between four types of power - force, manipulation, persuasion and authority. Force he defines not only in the ordinary sense as the ability to coerce physically, but also in a psychical sense when the perpetrator can inflict mental or emotional harm on a person or group. Manipulation occurs when the power-holder conceals his intent from the power subject, but nevertheless pursues the intended effects consistently, often without regard to the feelings and intentions of the other party. Persuasion takes place where A presents arguments, appeals or exhortations to B and B, after independently evaluation their content in light of his own values and goals, accepts A's communication as the basis of his own behaviour. If the essence of persuasion is the presentation of arguments, the essence of authority is the issuance of commands. Authority is an example of the untested acceptance of another's judgment, whereas persuasion is

the tested acceptance of another's judgment.

Much of the earlier discussion on the nature of authority was influenced by Weber's definition of authority or domination, as most translators have rendered the German term "Herrschaft", in terms of any command-obedience relationship. Wrong endeavours to separate out the different strands involved in authority by a comprehensive definition of factors which goes wider than Weber's original statements. Coercive authority occurs where, for A to obtain B's compliance by threatening him with force, B must be convinced of both A's capability and willingness to use force against him. Such a phenomenon is normally only apparent in a political context. However, there can be little doubt that with the exception of the use of force itself, coercion is potentially the most extensive form of power because it requires the bare minimum of communication and mutual understanding between the power holder and power subject. Induced authority is the second of Wrong's categories. This is defined as the counterpart of coercive authority since it is based on inducement, or the offering of rewards for compliance with a command rather than threatening deprivations. If coercive authority is the basis of political power, authority by inducement is characteristic of economic power, or at least of those forms of it that fall short of crude economic exploitation. Legitimate authority is referred to by Wrong in the classical sense of being a power relation in which the power holder possesses an acknowledged right to command and the power subject an acknowledged obligation to obey. It is the source rather than the content of any particular command that endows it with legitimacy and induces willing compliance on the part of the person to whom it is addressed. Authority based on the competence of the power holder or specialized knowledge or skill, has received relatively little attention in comparison to the other

forms of authority. The authority of "doctor's order" may be taken as the prototype of competent authority. The doctor who says "stop drinking or you will be dead within a year" is not threatening to kill the patient should the patient refuse to comply: the doctor's authority does not rest on the ability to impose any coercive sanctions. Nor is the doctor appealing to a duty or moral obligation to obey that is incumbent on the patient: he may greet the patient's refusal with a shrugged "do what you want, it's your life". Legitimate authority is not therefore involved. Competent authority resembles persuasion, which is why it has often been seen as the most benign and desirable form of authority. The final type of authority characterized by Wrong is that which is personal. In a relationship of personal authority the subject obeys out of a desire to please or serve another person solely because of the latter's personal qualities. Personal authority might be considered a "pure" type of authority in which commands are issued and obeyed without the initiator possessing any coercive powers, transferable resources, special competence or legitimacy conferred by a community. The prototype of personal authority is the power of the loved one over the lover who declares "your wish is my command" and who acts accordingly. Love, admiration, friendship or the presence of a psychological disposition toward dominance and submissiveness are the basis of personal authority relations.

Power, when treated as an aspect of philosophical discourse, is never far removed from the debates which have been evident amongst political philosophers such as Plato, Hobbes, Locke, Hegel, Marx and Popper about the role of power in the context of society and the state. It became common to use the word bureaucracy as synonymous with that of the organization as a whole. Weber's (1947) interpretation of

bureaucracy as an ideal type viewed it primarily as a rational and "technically superior" instrument. However, though he never fully developed the ideas theoretically, he also saw bureaucracy as a structure of political domination. He stated, on the one hand, that bureaucracy was a form of administration based on knowledge and expertise, but he also saw that bureaucratic authority was always, in some measure, an expression of power stemming from its overall rational-legal legitimation: authority based on expertise, and authority based on sheer incumbence in office. In other words, bureaucratic organization requires some degree of obedience as end in itself: obedience is due to a superior, not only because of his technical knowledge, but also because of the office he occupies. Authority, a form of power, therefore takes on political connotations over and above its technical *raison d'être*. Weber's definition of power proved to be very influential: it was ".....the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis on which this probability rests." A number of sociological theorists have equally defined power in such restricted terms, as a specific type of relation between objects, persons and groups.

The Weberian concept of power had, and still has, considerable influence on discussions in this area. Dahrendorf (1968) argued that power is a contingent property, a property of individuals, rather than a property of social structures. "The important difference between power and authority consists in the fact that whereas power is essentially tied to the personality of individuals, authority is always associated with social positions or roles....power is merely a factual relation, authority is a legitimate relation.....we are concerned ex-

clusively with relations of authority, for these alone are part of social structure." This view was subsequently criticized by Martin (1971) on the grounds that the distinction between power and authority in these terms is a false one, since definitions of legitimacy are themselves contingent on power relations.

Blau (1967) defined power as "the ability of persons or groups to impose their will on others despite resistance through deterrence either in the form of withholding regularly supplied rewards or in the form of punishment, inasmuch as the former, as well as the latter, constitute, in effect, a negative sanction". The capacity to produce intended effects despite resistance has given way to the capacity to produce intended effects despite resistance through the use of negative sanctions. We may then ask what distinguishes a negative from a positive sanction. How regular and how much does a reward have to be before its loss becomes a negative sanction? It is not the content of the sanction in itself, for the ultimate negative sanction of physical force has been distinguished from power and defined as coercion. Instead, Blau adds that "it is necessary to decide, depending on the purpose at hand, whether the defining criterion is the subordinate's expectation or the superior's intent." The relative nature of this comment appears to be at odds with the formulation of the definition, for the cessation of the regular provision of rewards must constitute a benefit for the superior in the relationship. The definition views the sanction from the perspective of the subordinate; the explanation suggests something different. This kind of uncertainty in definition displays some of the difficulty in achieving precision in the description of power.

Weber's definition and its derivatives are seen by Martin (1971) as suffering from a number of weaknesses as well as operational diffi-

culties introduced by the "element of potentiality". Two major problems are cited. Parsons (1967) has argued that the assumption of conflict and antagonism is built into the definition: A overcomes the resistance of B, implying that the interests of B are being sacrificed to the interests of A. But this appears to ignore the possibility that the power relations may be relations of mutual convenience. Power may be a resource facilitating the achievement of the goals of both A and B, in the same way as money may facilitate the achievement of the goals of both borrower and lender in a relationship involving credit. Seen at a societal level, power may be characterized as a means for the achievement of collective goals in certain circumstances, instead of a specific means for the satisfaction of limited, sectional interests.

The second major difficulty with the Weberian definition of power is that it transposes the property of interactions, of interrelations into the property of actors. Instead of defining the term power, Weber provides the basis for a comparison between the attributes of actors, who are more or less powerful to the extent that the probability of obtaining compliance with their wishes increases or decreases. It is a short step from this definition to the view that power is a generalized capacity instead of an attribute of a specific relationship. But, although it may be possessed as a capacity and is only revealed in behaviour, it is the property of a relationship. To revert to the analogy which is so common a feature in the discussion of power, it is the electric current rather than the electric generator.

Talcott Parsons (1967), in an attempt to avoid defining power in terms of conflict, suggested a completely different conceptual approach, viewing power as a system resource. "Power then is generalized capa-

city to secure the performance of binding obligations by units in a system of collective organization when the obligations are legitimized with reference to their bearing on collective goals, and where, in case of recalcitrance, there is a presumption of enforcement by negative situational sanction - whatever the actual agency of that enforcement".

The generalization referred to means the ability to transfer power from one relationship to another, the political equivalent of the economic distinction between bartering and market relations; "legitimation with reference to their bearing on collective goals" means the acceptance of the relation by both sides because of its function in achieving social system goals; and "negative situational sanctions" means the use of moral deprivations as distinct from moral blackmail. We see here Parsons defining out of existence the problems which have usually preoccupied the writers on power. Parsons places consensus where Weber placed conflict. Glendon (1969) pointed out "what slips away out of sight almost completely in the Parsonian analysis in the very fact that power....is always exercised over someone. By treating power as necessarily legitimate, and thus starting from the assumption of consensus of some kind between power holders and those subordinate to them, Parsons virtually ignores, quite consciously and deliberately, the necessary hierarchical character of power and the divisions of interest which are frequently consequent upon it". Parsons was well aware of the one-sidedness of his analysis. He chose to construct his own terminology and thereby rejected the conception of power as coercion.

The two major strands in contemporary discussions of power, the Weberian and the Parsonian, both contain major problems of definition. By building the element of conflict into his definition, by seeing

power solely in zero-sum terms, Weber disregarded the possibility of mutually convenient power relations. Moreover, by seeing power as a capacity; he transformed an attribute of a specific relationship into a generalized facility. On the other hand the Parsonian approach suffers from the opposite difficulty. By defining power in terms of consensus and legitimacy Parsons sidesteps what is seen by many students of power to be the central issue. The Weberian conceptualization of power has been more influential than the Parsonian in actual analyses of power relations, both in terms of political science and sociology. When people talk of "power" in industry, either on the part of management or the workers, they are usually referring to the apparent capacity of one group to "impose" its own preference on the other, or at least to restrict the other party in their choice of behaviour. And yet, social relations in industry are not characterized solely by conflicts of will or preference. Industrial organizations can also be viewed as collectives of people working together to achieve certain goals. To say this need not imply any Parsonian assumption of "consensus" and common values, and can be quite consonant with a recognition of the fact that "organization may originate in the imposition of one group's purpose on another" (Albrow, 1968). Some radical, Marxist-influenced writers have pointed out that the very contradictions inherent in capitalist production derive from the fact that industrial work and the relationships, including power relationships are both "social" and "exploitative". As Beynon (1973) commented: "Because production has a social basis, the factory can obviously be seen, at some level, as a collectivity with management operating in a co-ordinating role. The contradiction of factory production, and the source of contradictory elements within class consciousness, is

rooted in the fact that the exploitation of workers is achieved through collective activities within both the factory and society generally". Such tensions and contradictions in the nature of industrial production are reflected in people's perceptions of power relations. Insofar as workers and management do co-operate to produce goods, power in industry can be seen in Parsonian terms as "a generalized medium of mobilizing commitment or obligation for effective collective action" as long as one holds in abeyance his notions of value consensus necessarily underlying collective action. Managerial power is only partly related to the obtaining of compliance, willing or otherwise, from a workforce: management also uses power to co-ordinate the use of raw materials and non-human resources to reach managerial goals.

Elliott (1980) has contrasted the Weberian approach and that of Parsons as the distinction between "power over" and "power to". In the first case power is analysed as a relationship which enables one individual or group to impose its will on the other: power over. The second approach is concerned to analyze power as a "system property", rather than as a property of individuals or groups, which enables the successful realisation of "system" goals. The emphasis here is on "power to", in the sense of a capacity to achieve certain goals or objectives. Whilst it is tempting to see these contrasting views as alternatives, an area which has been somewhat less explored is the extent to which they may be related, or possibly depend on each other. Elliott argues that the reason why management requires a measure of "power over" employees is to ensure that it can control their activities and co-ordinate them with other areas of managerial activity, so as to safeguard the attainment of managerial objectives and goals - which are typically referred to as "organizational goals". In other

words, management requires "power over" employees in order to maintain its "power to" realise systems goals. To the extent that these goals are perceived or interpreted as being in opposition to the interest of employees or insofar as the attainment of these goals requires employees to behave in ways in which they would not otherwise choose to behave, then the ultimate emphasis would be on "power over" rather than "power to". It seems likely that both these conceptualizations of power will be significant in understanding the nature of power relations in industry, and above all, how these power relationships are perceived by actors in the system. Blau (1964) also developed the Weberian approach by using concepts of exchange relationships and dependency, emphasising strongly the elements of reciprocity on power relationships. The idea that power is finite and is balanced in an organization is not apparent in the Parsonian approach, which was that an increase in the power of superiors need not mean a decrease in the power of subordinates. For Blau, the mediation of goals within a dyad can be viewed in terms of an exchange between actors. Thus, B can establish power over A by supplying resources which A is dependent upon in the absence of alternative sources of supply. If A is unable to reciprocate with resources of equivalent value and thereby make B dependent upon him in return, the exchange relationship becomes unbalanced. However, in this situation A is still obligated to repay the debt in some manner, and an alternative way of doing this is to display obeisance by according to B's wishes, thus allowing B to gain power over A. In this way power is derived from exchange in that it equalizes the imbalance of exchanged resources. Lammers (1967), in looking at a specifically

industrial context, also developed the notion of power as a non-fixed resource, that by increasing the "power" of subordinates, management is not necessarily decreasing its own power, in the sense of its capacity to achieve organizational goals. Mechanic (1962) had earlier attempted to take the discussion further by demonstrating that power can be exercised by lower participants in an organization by virtue of their access to information which is vital to their superiors. The dependence of management on any one group of employees and hence the power of any one group of employees over management, will again be crucially affected by the substitutibility factor, by "the ability of the organization to obtain alternative performance for the activities of the subunit". The less easily an individual, work-group or department can be replaced by another from inside or outside the organization, the greater power capacity that unit will possess. Of course, the possession of such power capacity does not necessarily mean that a group of employees will actively exercise such power. "Possible" power will only be translated into "realized" power if employees are both aware of their power capacity, and of having interests opposed to those of management, which they might use this power capacity to promote. To utilize their power capacity workers must also have a considerable degree of organization and cohesion. Bacharach and Aiken (1976) dealing with a similar dilemma - how the higher echelons of an organization can gain reliable information for decision-making and at the same time avoid losing control of subordinates who supply it - suggest that the answer lies in the distinction between the use of authority and of influence. They argue that authority, which is

the right to make final decisions, must be retained by the higher echelons while influence should be widely distributed within the organization. This suggests that some forms of power should be more equally distributed than others.

Our discussion of the role of power so far has brought us from the arena of philosophical discourse and its association with the function of the state in society, into the setting of the organization itself. The perspectives of the organization working as an open system interacting with its environment were most thoroughly elucidated in Miller and Rice (1967) and Thompson (1967). In particular, focus was put on the functions of organizations as decision-making power systems interacting with their environments in conditions of uncertainty. This perspective may be traced back to the examination of dysfunctions and cognitive rationality by March and Simon (1958) and the study of organizational decision-making processes by Cyert and March (1963). As Thompson expressed it: "A newer tradition enables us to conceive of the organization as an open system, indeterminate and faced with uncertainty, but subject to criteria of rationality and hence needing certainty...we suggest that organizations cope with uncertainty by creating certain parts specifically to deal with it, specializing other parts in operating under conditions of certainty, or near certainty". Thus the task is divided and allotted to the sub-systems, the division of labour creating an interdependency among them. Imbalance of this reciprocal interdependence (Thompson, 1967) among the parts gives rise to power relations. The essence of an organization is limitation of the autonomy of all its members or parts, since all are subject to power from the others; for subunits, unlike individuals, are not free to make a decision to participate, as March and Simon (1958) put it,

nor to decide whether or not to come together in political relationships. In reality they must: they exist to do so.

In one of the earlier studies on interdependency in two USAF bomber wings, Thompson (1956) argues that these bases develop "because of the technical requirements of operations" and suggests that they include being in a "centralized" position with the organization, and being involved in strategic "communication". Dubin (1957) puts a similar stress on "the technical requirements of operations" with an emphasis on a "system of functional interdependence" in which some tasks will be highly "essential" to the system, and are the "exclusive" function of a particular party. Thus, Scheff (1961) explained the power of hospital attendants by reference to the ward physicians' dependence upon them. This dependence ensued from the large amount of administrative responsibility the physicians had to assume. Attendants would take on some of this responsibility in return for increased power in decisions regarding the handling of patients. If the latter part of this exchange was not fulfilled the attendants would withhold information, disobey instructions, refuse to handle paperwork officially the responsibility of physicians, and fail to serve as a barrier between the physician and a ward full of patients demanding attention and recognition. In this way the attendants could wield influence by suddenly refusing to assume responsibilities which the normally assumed but which were not their legal responsibility to assume.

In this debate on power a number of writers were developing arguments which were analogous to a game of chess in which the pieces gain their power through their current position rather than simply through their power to make certain moves in accordance with the rules of the

game. There is a danger in defining power purely in terms of its relationships rather than the process by which a situation develops over time whereby the history and rules of a situation may be re-written. An organization may find itself in a situation in which the rules are frequently changing and not at all clear. Therefore, whoever is able to exploit this uncertainty, and rule in his own interest, would in this sense have power.

This was the essence of the formulation by Crozier (1964), that "the control of uncertainty confers power". He described the situation in a factory of state-run monopoly which produced cigarettes by mass-production. The monopoly therefore controlled the sales levels of the factory's output. Almost every activity seemed to be hemmed in by constraints of a technical or of an organizational nature. For example, the factory's output goals and process of mechanization were fixed: the majority of petty decisions were centralized or were rigidly standardized. The task of the factory was to organize the work of 350 employees and some 45 machines into four limited functions: (1) the preparation of raw materials; (2) the maintenance and setting of machines and buildings; (3) the utilization of man-machine combinations for output in several parallel production segments; and (4) the allocation of jobs among employees. None of the manufacturing sub-units was able to determine its own mode or pace of mechanization. They could not acquire additional income through sales, as this was not one of the functions of their control. The accountants in the organization did not welcome innovations which would require capital investment, since the funds were not available to commit to this purpose. Thus the organization was unable to reorganize its basic technology, nor was

there any control over the allocation of jobs. At a national level the monopoly faced union pressure which prevented the plant from engaging in any autonomous personnel policy measures. Output, norms, workload and pay rates were all fixed at the national level.

As Crozier put it, it appeared in many respects as though this organization represented precisely the ideal type of bureaucracy in the Weberian sense. However, this was not the case in all respects. Although the bureaucracy appeared to be highly structured and rigid, a group of the workers who carried out maintenance work had the capacity to exercise their own illegitimate "parallel power", which they used in their own interests against those of supervisors and production workers. The maintenance men were paid on a fixed salary, in comparison to the unskilled piece-rate payments of production workers' jobs. In order to maximize their earnings under the bonus system the production workers' interests were clearly in a continuous flow of work. Any machine failure or breakdown lessened the production workers' earnings, and in these circumstances only the maintenance men had the necessary skill for repairing the machines. This gave a situational skill advantage, or a form of power, which became the basis of local plant dependence on the maintenance men by both management and workers. Crozier did not claim that the maintenance men were the most powerful members of this bureaucracy. Instead he suggested within the existing context of organizational rules which constitute the formal power structure there may exist areas of uncertainty which groups or individuals are capable of controlling. As such this may also be described

as a form of resource dependency.

However, the possession of expertise in role performance, and its use in coping with situations of uncertainty was characterized in a fuller way by Hickson et al. (1971). In developing the "strategic contingencies theory of intraorganizational power", they built up Thompson's (1967) open systems approach, which had incorporated the functionalist tradition in sociology with the behavioural theory of the firm in economics. A number of other influences are also acknowledged in the development of this theory, notably Blau's (1964) notion of "exchange theory", Crozier's (1964) inter-relation of power with uncertainty, and Dahl's behavioural concept of power as elaborated by Kaplan (1964). Emerson (1962) had earlier developed the notion that expertise in role performance and coping with uncertainty were in themselves insufficient unless this power was monopolized. Thus the "functional importance" of an activity only confers power if his performance is "functionally exclusive", an approach which was also developed by Dubin (1963) and Mechanic (1962). Finally, Hickson et. al incorporated the notion which had earlier been evident in Mechanic (1962) and Woodward (1965) concerning the centrality of a subunits work activities. This notion had been subdivided into "pervasiveness", the degree to which the work-flows of a subunit connect with the work-flows of other subunits, and "immediacy", the degree to which the cessation of a subunit's activities would quickly and substantially impede the primary work-flow of the organization. They argued that power, as individually perceived in terms of weight, domain and scope,

is fuelled by four dependency-generating factors: the ability to cope with uncertainty, nonsubstitutability, pervasiveness and immediacy, thus giving a subunit the control of "strategic contingencies".

The strategically contingent system advanced by Hickson et al. is thus composed of plural and countervailing powers which constitute the organization, the essence of which is the limitation of the autonomy of the parts. Gouldner (1967) had already modified the traditional "open systems" model of the organization by pointing out that certain parts of a system may be relatively more autonomous than others. In the case of the working organization which he was describing the autonomy of the units was not so great that they might ultimately destroy the whole. He proceeded to develop the view that the environment of the organization determines the behaviour of the organizational sub-unit, because of exchanges of resources at various boundaries, with the resource inputs to the sub-unit being hypostasized as "uncertainties". In effect the reduction of these uncertainties is the goal of the organization, and in turn it provides the resources for sub-units to exchange with each other and with the environment external to the organization. It follows that changes of power are caused by a changing capacity to cope with the uncertainty caused by a systematic adaptation of sub-units to changing, or changed, environments.

Two important caveats to the assumptions made in the "strategic contingencies" approach were made by Child (1972) and Clegg and Dunkerley (1980). Child took issue over the extent to which the environment unilaterally fashions the adaptation which has to be made by sub-units and tempers the question of resource dependency by the choice which may be available within the organization. As he pointed out, "... the directors of at least large organizations may command sufficient

power to influence the conditions prevailing within environments where they are already operating. The debate surrounding Galbraith's (1967) thesis that the large business corporation in modern industrial societies is able very considerably to manipulate and even create the demand for its own products centres on this very point. Some degree of environmental manipulation is open to most organizations. These considerations form an important qualification to suggestions of environmental determinism".

Clegg and Dunkerley question whether the sub-unit is necessarily a unitary and harmonious collective, speaking and acting with one voice. The sub-unit may well be a collective, but one which is spoken for by one voice and which over-rules competing interests, attachments, strategies and meanings. If it is not this, it may be laid open to the charge that it does not embrace the prevailing management ideology of the organization. If it is this, they claim, the environment would be that which the managers thought important and problematic. The conclusion which they draw is that those who seek to define power in these circumstances should be careful to define spontaneous interaction by the group with its environment and a perspective on the environment which is constituted by managerial definition.

In looking at the role of management ideology and the power of sub-units in the working of an organization, we are aware that the notion of "dominant coalitions" and "ruling elites" was developed by Cyert and March (1963) and that such power was no longer necessarily co-terminous with ownership. One of the earliest references to the modern phenomenon of the separation of ownership and control (and hence the locus of much power) was in the work of Berle and Means (1932) "The Modern Corporation and Private Property". They attempted empirically to demonstrate that despite the pattern of stock ownership,

shareholders were becoming less influential in the conduct of corporate affairs; and that in consequence the power in the control function of management was being superseded by that of management. This idea was also developed by Burnham (1941). It is at this point that writers can hardly avoid taking a political perspective of one kind or another in regard to power being exercised within organizations. Plato, in his "Republic", had characterized the good society as that in which men are free to use and develop their natural abilities, attributes and capacities. In this version of power, if it is to be exercised the person must have access to whatever means are necessary in order that he or she may use and develop natural attributes, capacities and abilities. To the extent that this access is denied, or limited and transferred to others, the power is diminished (Macpherson, 1962). In his description of the development of early economist theory, Macpherson (1973) drew the conclusion that the assumption of a power struggle as a principle of the system fulfils the same function in organization theory as does the principle of unfettered competition in economic models of price equilibrium. Such economic models are based on the assumption of a freely competitive market for resources and commodities in which there exists a division of labour and exchange of products and labour. It is assumed that each individual in this market will rationally try to maximize his or her gains. Therefore, in circumstances in which both a division of labour and an exchange of commodities and labour exist, it would follow that competition would determine prices for everything in a determinate state which tended to equilibrium (Lipsey, 1963). What to the economist is the achievement of equilibrium is to the organization theorist a state which involves the creation of a number of "dependencies". The ontological assumptions of the market theory by economists were adopted as a justi-

fication for a liberal-democratic type of state among political theorists from the time of Hobbes onwards, and indeed are still widely held by contemporary economists of the right (Friedman, 1962, Hayek, 1973). This approach, referred to by Marx (1973) as "vulgar" political economy, was characterized by Rowthorn (1974) as "subjective individualism, naturalism and exchange".

Marx challenged the view implicit in the works of some economists that the exchange of reward for services was a fair one, a view which was to have deep implications for the debate about power amongst social theorists. He argued that in the context of the industrial organization the worker sells his labour power to the capitalist in return for wages, which is in effect an unfair exchange. His argument for the unfairness of the exchange rested largely on the existence of profit which it was claimed should be distributed among workers who had in large measure contributed to it. The industrial organization was therefore an instrument of power created by capitalists for the attainment of profit where the "inducing" and "contribution" of organizational membership were a mask for an unjust and exploitative exchange. Clegg (1975) developed a model using ideas developed by Weber (1968) and Cicourel (1973), which put into perspective the dialectical challenge of the Marxist approach to the basis of power. He separated out power and rules as operating conventionally within organizations through forms of exchange and rationality respectively from domination, which was a form of life emanating from forces outside an organization, but which deeply permeated it through economic activity. Look at in this sense, the Marxist perspective on power within organizations, as seen in Benson (1977), Heydebrand (1977), and Goldman and Van Houten

(1977), is less of a criticism of the entire field, and more properly a general perspective on social life drawn from Marx's analysis of economic structure and its ramifications. Rules are seen to objectify the structure of domination and are foci of orientation for individuals, thus providing the framework for everyday actions and the exercise of power. The trilogy of power, rule and domination was developed by Clegg by means of a terminological discussion of Weber's terms "Macht" and "Herrschaft". However, as Whitley (1977) points out, Clegg leaves his reader in some bewilderment at the rapidity with which he moves from "power" to "authority" to "rule" to "domination" and back to "power" with apparent differences in meaning. Whitley suggests that "Herrschaft" is best translated as domination which is justified or legitimated in terms of a set of customs, habits or norms. Authority would, then, be understood as any particular form of legitimated domination. Clegg acknowledges his debt to Weber, but at the same time appears also to disregard his awareness that power can, and does, arise from market structures. In doing so, he follows Dahrendorf (1959), amongst others, in reducing Weber's analysis of power solely to the exercise of individual force; hence, to sociological irrelevance. Power, according to Weber, need not be exercised on an interpersonal basis, but can arise through control of market resources and affect a host of anonymous individuals. In this usage, power is obviously not a surface phenomenon since it requires mediation through a set of rules and understandings called a market. Whitley notes that although markets may reflect and manifest a particular structure of domination, they may also legitimate actions as when they are invoked under the rubric of the "laws of the market" and "perfect competition".

Our discussion of the implications of the exercise of power has

ranged from the individual in relation to the group, the organization, the environment through to wider society with the political consequences of that society. Whilst the separate descriptions of the phenomena at work may suggest that discreet boundaries may be drawn around them, we must not lose sight of the inter-related nature of individual acts of power according to the criteria used. As Mangham (1979) saw it: "It has been argued that the activities of individuals and groups within enterprises are inherently political: a process in which one or more individuals attempt to define a situation or negotiate order in such a way that their individual goals are promoted this process is not peculiar to organizations; it is a basic one underpinning all forms of interaction in all aspects of society. Society and organizations are, ultimately, dependent upon the micro politics of dyadic encounters; encounters in which meaning interpretation, the self and role-playing are crucial features". Whatever the broader political or societal backgrounds to the possession of power, the exercise of it invariably comes back to the inter-relation between an individual and another or a group of people directly in association. Within this context the process of decision-making, with its clear implications for the use of power, has been the subject of scrutiny. The notion that power is exercised through the taking of a decision at a single moment in time regardless of other influences is difficult to substantiate. As Cyert and March (1963) put it: ".... the goals of a business firm are a series of more or less independent constraints imposed on the organization through a process of bargaining among potential coalition members and elaborated over time in response to short-term pressures. Goals arise in such a form because the firm is, in fact, a coalition of participants with disparate decisions changing foci of attention, and limited ability to attend to all organizational

problems simultaneously". Their research showed how this process came about by the decentralizing of decision-making within the organization. In an earlier work, Cyert et al. (1956) showed how decision-making occurred horizontally as well as vertically within an organization in recording the decision (arrived at over a three year period) to install electronic data processing equipment. They showed how a variety of managerial and other personnel from accounting and sales departments were involved, together with a range of executives on a management committee, the company president, various computer company executives, consultants, and influential outsiders met at conferences.

Pettigrew (1972) studied a similar type of decision-making process in a British company, which demonstrated the power of a manager who was at the centre of a similarly wide range of internal and external contacts over about five years. He noted a maze of talking and more talking, considering and more considering, informing and re-informing in most decisions, except for the more programmed, autonomous, and trivial. As Lindblom (1959) pointed out, the optimum decision made in a detached way by exact calculation from all relevant information, somehow uncontaminated by other affairs of the world, probably does not exist outside books on mathematical exercises. Simon (1947) and Cyert and March (1963) emphasized from their findings that the process of decision-making can move spasmodically within a restricted set of possibilities, priorities switching from one time to another and different aspects being weighed in the balance from one point to the next. It arrives at a compromise that will do for the time being, within the bounds of power and practicability.

The question of power allocation within an organization has lent itself naturally to attempts to gauge the amount of power or influence possessed and exercised by organization members by their peers and

subordinates. Tannenbaum (1968) posed questions about influence "as is" and "as ought to be" in thirty two geographically separate sites of an American delivery company. Not surprisingly, the perceptions of influence in the descending order of the hierarchy from managers to supervisions and workers in the company were shown to be rated as "great", "some" and "little" respectively. However, the respondents were consistently of the opinion that the categories of people named "ought to have" more power than they actually had. It is clear that there are differences in the spread of hierarchical power and influence among organizations. Gouldner (1954) distinguished between two types of bureaucracy, one where power is based upon technical expertise and knowledge, and where there is a considerable degree of low level involvement in decisions and commitment to what are seen to be sensible and mutually agreed rules, and procedures, and the other where procedures, rules and decisions are highly centralized and enforced through discipline. This distinction also found expression later in the work of Burns and Stalker (1961). Goffman (1968) also characterized the rigid bureaucratic use of power in "total institutions", such as the prison or correctional services. Also at times the armed forces, or religions institutions such as monasteries or nunneries, or boarding schools, or merchant ships, come close to the exercise of such power.

The discussion of power has tended to be dominated by the notion that it is the capacity of use resources to affect others. It might be inferred from this argument that power flows in one direction only. However, as Pugh et. al. (1971) points out, a fundamental question to be answered in their context is: "Why do people in organizations conform to the orders given to them and follow the standards of behaviour laid down for them?" The answer put forward most cogently by Etzioni (1961) is in the different degrees of compliance elicited from within the organization. He defines compliance as "the relation in which an

actor behaves in accordance with a directive supported by another actor's power and to the orientation of the subordinated actor to the power applied". Etzioni proceeds to develop a typology of organizations based upon the kind of compliance involved by members, or in his words, the "differential commitments of actors to organizations" and "the kinds and distribution of power in organizations". Within organizations there are, he suggests, three basic types of power: coercive, remunerative and normative. The difference between these types lies in "the means employed to make the subjects comply. These may be physical, material or symbolic" (Etzioni, 1961, p.5). Coercive power is based upon the potential to use physical force, restraint, or the restriction of activities. Remunerative power refers to the control over material resources, particularly through the way wages are distributed and fringe benefits allocated. Normative power depends upon what Etzioni refers to as "the allocation and manipulation of symbolic rewards and deprivations through the employment of leaders, manipulation of mass media, allocation of esteem and prestige symbols, etc.". The way in which organization members react to the exercise of power to which they are subject, comprises the other side of the compliance relationship. As with the power types, Etzioni distinguishes three types of involvement: alienative, for creating distance or antagonism; moral, for inducing high commitment to the organization; and calculative, which occupies the mid-zone between the two. Table 2 indicates the kinds of power in relation to the kinds of involvement:

Table 2 Kinds of involvement

Kinds of power	Alienative	Calculative	Moral
Coercive	1	2	3
Remunerative	4	5	6
Normative	7	8	9

Source: Etzioni, 1961, p.12

By the use of cross-tabulations, it is clear that theoretically there are nine possible combinations of power and involvement, that is, of compliance. Etzioni argues that three of the types (1, 5 and 9) are found more frequently than the other six types and therefore constitute the most congruent relationships: the coercive - alienative, the remunerative - calculative, and the normative - moral. He opines that compliance relationships are a central element in organization structure and that organizational effectiveness can reach its full potential when there is congruence between power and involvement. Etzioni's typology is elegant and appears to encompass many important differences in the way in which individuals may define their situation within an organization and interpret the power relationship of a superior and a subordinate. Silverman (1970), on the other hand, makes the point that by explaining congruence in terms of a supposed dynamic towards greater efficiency, he retreats into a postivist systems form of explanation. By not answering the question, as Burns (1967) puts it, of "for whom and for what are organizations to be reckoned effective?" (p.121), he makes us suspect that his analysis is in terms of an unquestioned system goal. Etzioni's reliance on explanations in terms of impersonal processes and "given" goals raise difficulties when the

question is postulated of how organizations become incongruent in the first place, leading Burns to accuse Etzioni of "an exercise in higher tautology".

French and Raven (1959) also viewed power from the standpoint of the member of the organization who is subject to it, but adopted a somewhat broader approach than Etzioni in linking compliance to the bases of power used by superiors, supervisors and managers of all kinds. They suggest the following bases of power:

- Coercive : the individual conforms because he believes he will otherwise suffer negative consequences, punishment.
- Reward : the individual believes he will benefit if he conforms.
- Referent : the individual is attracted to and identifies with another, and so conforms to his desires.
- Expert : the individual believes that another has superior knowledge or expertise to which he defers.
- Legitimate: the individual accepts the right of another to power over him.

We may express the typology in practical terms. A supervisor may have an employee's pay withheld for late attendance, or allocate to him the most troublesome work of the unit, i.e. use coercive power. Or the supervisor may recommend a pay increase, i.e. reward power. If the supervisor is personally admired by his subordinate he can successfully ask for extra work, i.e. referent power. Should the supervisor be known for his skill at the job then the subordinate will accept his instruction as expert power. And finally, if a subordinate conforms because he believes that it is in some sense "right" to do so, or in the proper order of things, then the basis of power is called "legitimate".

The five bases resemble the categories set out by Etzioni, though his are meant to show broad differences between organizations whereas French and Raven imply that within any one organization individuals may

differ in their reasons for complying. French and Raven's coercive power includes Etzioni's physical coercion, but extends also to the negative aspects of remunerative power: reward power and remunerative power appear to match: referent power matches Etzioni's normative or identitive power, and expert power may also come within the normative category. Legitimacy is treated differently, however. In Etzioni's scheme, coercive, remunerative or normative power may each be used legitimately or non-legitimately or in some degree legitimately. In this light, the listing of legitimacy among the bases of power by French and Raven is confusing, even mistaken. Legitimacy is arguably an exclusive category of power base, but a variable quality of each of the other bases. For example, coercion can be legitimate (the control of escaped prisoners or deserters from an army) or non-legitimate (physical brutality to factory workers); expertise can be legitimate (the accountant's decision on a budgeting problem) or non-legitimate (the use of medical doctors in torture to obtain information). A great deal will depend upon the moral stance attributed to the person discussing power.

Not all perceptions of the nature of power have proved to be prescriptive. Mangham (1979) has advanced a truly organic view of its nature, emerging from the negotiated order between individuals and groups. This view is a refinement of the idea which emerged from Cyert and March (1963) that organizations are coalitions of varying interests. Identifiable groups such as employees, shareholders, suppliers and governments all impinge upon the organization: inside the organization personnel people, engineers, accountants, marketing people and production workers also have their interests. It follows that each group has a distinct and different set of preferences for organizational action and each group may operate different criteria for the evaluation of

organizational criteria. So rather than viewing organizations as rational, mechanic machines with clear and unambiguous objectives, Mangham sees organizations as products of negotiated order and that order is influenced by the power and skills of particular individuals and coalitions. To this extent all activities of individuals and groups within not only organizations but society at large are inherently political, involving encounters in which meaning, interpretation, the self and role-playing are crucial features. Behaviour within organizations may be characterized as the struggle of reasonable men to have their view of what is reasonable to prevail. This is done by selecting, developing, controlling and sustaining the definition or interpretation of the situation by individuals or groups, since if it is possible to get others to share one's definition or interpretation of the situation by individuals or groups, then it will be possible to get other to share one's definition of reality.

POWER IN ORIENTAL GAS PRODUCTS: PERCEIVED AND PRESENCE

In addressing the source and manifestation of power in an industrial concern such as Oriental Gas Products, the observer is aware of the "bottomless swamp" that Dahl (1957) perceived in trying to formulate concepts of power. Power has been discussed in a variety of contexts: that which is vested in the individual, the role of the group, the organizational context and the setting within a particular society. The concept of power is also difficult to grasp since in this organizational setting individuals rarely, if ever, invoke the source of their authority: it is built in to the different positions in the managerial hierarchy. From time to time the results of power were evident in decisions or actions, often not accompanied by an outward display or acknowledgement of what was going on. The day-to-day adaptation of behaviour within the overall framework of power has been described as symbiotic, or a state of continuous mutual adjustment. As this process continues a pattern of "perceived" power inevitably emerges in the minds of the principal actors on the organizational stage as a changing tapestry.

The ingredients in the notion of perceived power are complex. As a human process they are not subject to precise or constant measurement. If that were the case, it would be further difficult to distinguish between reality itself, the individual's perception of the reality of power (which may be somewhat different) and any further motives at work which might serve to present yet another perception. This latter category might include a person nervous of or intimidated by the presence of an interviewer. Indeed, it could be argued that the interview itself becomes part of the power process in an organization insofar as it touches upon sensitive ideas of inter-personal relation-

ships. The approach adopted by the writer in his encounters within Oriental Gas Products may be seen as a form of interpretation through action rather than a pursuit of the positivist path. The methodology is idiographic, examining particular cases, based on the ideas evident in Schutz (1962), Berger (1966) and Weber (1964), that the social world can be understood in part by gaining a knowledge of the subject in question and the way that person perceives the world.

Since the approach was individually interpretive in spirit rather than comparative, the recorded perceptions were taken from the actors in the third and final phase of structuring over an extended period in 1984. At this time the managing director had four managers directly accountable to him and two indirectly (through the general marketing manager). Because of organizational change and the succession of appointments in the previous four years, most of the actors concerned had not been fully part of the scenario as it had developed: only one had been involved in Oriental Gas Products for the whole of the period.

The discussion on the source and nature of power with the seven actors is represented here by way of transcripts of discussions with each of them. Only minor modifications have been made in the wording, rather than the sense, used by the discussants for the purposes of clarification. Set in parentheses are statements or questions on the part of the writer, giving an abbreviated sense of the discussion leading up to the responses.

Managing Director

[The basis of your power and authority in this organization.]

"It is very material, and I think that in this sort of cultural climate in the region one is able to exercise more authority because of

one's position, compared to a western organization. There is much less questioning of the individual. Although it's a question of degree rather than being absolute, it's fairly clear in our type of organization what is the scope of one's authority. There is still scope for an individual to take initiatives in certain areas either because of his drive to do so or on grounds of technical competence."

[The legal/rational power in the event of dismissal.]

"The authority is there. Dismissal would never take place without reference to me, but the nature of the circumstances would dictate the quality of power exercised. For example, in a case of dishonesty the policy is quite clear and the implementation automatic, subject to reference to me. On the other hand, the issues might be rather complex and the very nature of the decision would rest with me, with the implementation to be carried out by others."

[The financial basis of power in a business organization.]

"From a financial point of view there are very clearly-defined break points in the power that can be exercised and at what level in the organization. It is very clear what decisions require approval at board level, those which require only my approval, and those that can be taken at one level further down. If we take the role of the finance manager, the type of authority which he exercises tends to be his knowledge of what is legal and acceptable in the country in which the company is operating. He would not by and large make a financial decision on a piece of capital investment in the manufacturing field: that would largely be done by the operations manager who has the technical knowledge to make such a decision. But the finance manager would enter into the decision in terms of whether that expenditure is capitalized

or expensed, because of his particular expertise in the account area."

[The delegation of power and authority.]

"My authority is delegated from me to the next level down insofar as I tend to define broad objectives, agree policies with the management group and then leave them to operate very much within that framework. This sort of delegation is less evident with the next level down. It is a characteristic of our organization here, and also of the place we are, that there is weakness in the middle management area, with an unwillingness to accept authority given on the basis of broad, general guide lines. The second line of supervisors have a strong position as authoritative figures with their subordinates, but their emphasis is very much that of applying the rules as given. I suppose to them the delegation of authority is less of a positive act by their managers and more of a practical delegation resulting from the way the company has been structured historically and the way the role of the supervisor has developed. It is more of a function than a series of acts of deliberate delegation."

Finance Manager

[Your perception of power and authority in the organization.]

"Because I worked my way up from a very low level, I rarely use authority alone to get things done..... maybe you can say that I rely on personality. I get things done not through persuasion, but through some sort of respect from my juniors: they know my perspective on things, which is generally better than theirs. If I ask them to do a certain thing, I will explain why I ask them to do it that way rather than another way and the likely consequences."

[Is authority backed up with forms of persuasion?]

"Yes, very strictly, rather than by a direct authority that I want them to do it this way or that."

[Is the use of authority perceived as reasonable, or is the big stick used?]

"On yes, mainly reasonable, but in some cases you have to use the stick, as not everybody can be persuaded. Especially in finance is it the case that sometimes you have to ask people to do things but you cannot give a reason, since some things are confidential. In such cases they will just have to do it, although it is usually quite rare in fact."

[Does your authority stem from the organization itself?]

"Yes, rather than the personality."

[Can the personality factor be kept out entirely?]

"No, but that's quite natural, because once you are given that procedure, you are responsible for certain things and usually you can get things done, that is unless you come across a person who just doesn't like his own work and has no sense of responsibility."

[How else is authority exercised?]

"Well, apart from the direct use of instructions, the other way that someone in authority can demonstrate that he is not happy with a subordinate is at the time of salary review, when it is on my authority whether I give you a \$100 or \$500 increase."

[And you would use the power of salary as a yardstick?]

"Yes, as an indicator on how I would feel about the work of my people. I think that this is one of the ways that senior people can exercise authority. If your subordinate does what you say, surely it will be appreciated and you will give them a reward. But although that is not a good way, it is more personal than work-related: ultimately that may be one of the ways you can get work done, unless the person does not care about salary. We do have cases like that when someone has been working for the company for twenty years or so and is approaching retirement age. In such cases the strict authority or salary criteria do not apply. It's more on a personal basis: you respect them and they finally respect you because of your knowledge."

General Marketing Manager

[What is your perception of power and authority in the company?]

"Authority has two or three bases. It is based on your position in the company, which is a kind of authority given to a particular person. The other feature is the technique you use to impose this authority. I think in this company authority comes with the position: it is fairly centralised in the managing director and the departmental managers. The departmental managers have a fairly large degree of freedom in how to run their departments. They have authority over appointments and their subordinate supervisors would have more clear guide-lines over what they do."

[The style of implementing authority.]

"Yes, I think the style of authority in this company depends a lot on the style of the managing director and departmental managers. It

shows that we are decentralised in that sense, but I would like to think that we can be autocratic or democratic depending on the issue in question. In the past few years we have been encouraging more participation of middle management in the decision-making process of the business. As marketing manager, my supervisors in gas sales equipment, medical sales and distribution would run the business whilst I provide direction and leadership. However, in certain things I am very autocratic, things like safety and customer service where standards are involved, but on a number of other matters it is possible to be democratic. A lot depends on the people involved."

[When a subordinate finds it difficult or impossible to comply with authority, is there a means of consultation or redress?]

"I don't think that the superior in that sense has the capacity to apply his authority well. If he keeps on exercising authority that people cannot follow, he has a problem and will never get anything done. So I think it is never black and white in terms of subordinate participation. Commitment is very important. We have had very few cases where the subordinate cannot follow the instructions or the authority. In other cases things do not normally reach that stage: people would resolve the matter through discussion before it reaches that stage."

[There is relatively little challenge to authority from Trades Unions.]

"We do not have formal unions, but like all companies we have to have certain consultation with the workers. We are not, on the other hand, given to firing people because they cannot follow instructions: normally the matter is settled before coming to that point."

Operations Manager

[How do you see the power and authority which you hold?]

"By being in control of major products, availability and costs, I very much affect the trading position: we are all working to achieve the bottom line of the trading summary. I suppose the other element you have to consider is the technical nature of my work. The same thing could also pertain to the Finance Manager. My boss is not technical by background and therefore I have a greater degree of authority than if I were reporting to somebody technical. I am really making recommendations and at the same time rarely prevented from pursuing what I consider to be a necessary course of action."

[There is a degree of shared power with the managing director.]

"Yes, I think that that has to be the case. What I suppose the managing director has to do is to make sure where one's department is carrying out something which does not impinge on or contradict the work of another department, so that it is co-ordinated and understood. I think that carries on all the way down the organization."

[Is authority separated between managers of equal rank in the organization?]

"I think it is fairly well separated..... Of course, there are always overlapping areas and there are some grey areas, but in general I think they are fairly well-defined."

[Do you believe that personalities can have an impact on authority?]

"Tremendously; I think that is what it is all about. Especially in an organization such as this, which is a small one and so you develop an organization structure to match the people that you have in that

organization. When you have a large organization, such as our parent company in Britain, then you can afford to develop the structure that you want to see and find people to fit the different roles that you want to exist. When you are restricted on the people resources you can't do that, so you have to develop an organization that best utilizes the people that you have. Our parent organization does this all the time with its subsidiaries. That's why every two years or so you will see a completely different structure, not only at the senior levels but all the way through. You have to develop organizations in order to develop the people and you have to be able to give people the responsibility that they can accept."

[What is the difference in the impact of the personality between a large and a small organization?]

"The larger you become the more functions you have and I suppose the more specific the functions will become. Therefore with size you have people with much smaller spheres of control in terms of breadth but bigger in quality or depth. Just say you break it down into products, in a bigger organization selling the same products as ourselves, only in larger numbers they could afford to have just one person concentrating on one particular product. But you couldn't afford to have that in an organization of our size. So people in a small organization have to work on a much broader perspective. Therefore it is more difficult to define the limits of their roles or fix them very rigidly. It affects career development. You could develop an organization that is perfect, but it will not be the same for the next twenty years since in those roles people will want to move into something else. In a big organization the period of develop-

ment is quite clearly spelt out: you join as an assistant engineer, you can move to a junior engineer, senior engineer, chief engineer, and there is room for a lot of people to do that. In Oriental Gas Products we only have one chief engineer, so of course any kind of a move could well be a move outside the territory, but there are not many cases of that. In terms of authority in our company, people's spheres of influence are very well defined."

Distribution Manager

[How do you see the nature of the authority which you possess?]

"The authority that is put on me comes from the position in the organization."

[Are you aware then that your authority comes from your managing director as well?]

"Yes, in this company authority is distributed to the few executives and they have been able more or less to centralise all their authority. My position at the moment is quite ambiguous: I don't have quite what level I am in. Some things are not, and have never been, clearly defined. But sometimes I can take up things which are left over. I have the discretion to do certain things myself and it is quite acceptable: that is the way things are done in this company."

[Do you delegate much of your authority to subordinates?]

"Well, I think I delegate most of the supervisory part of my job to my subordinates, but to some more than others such as the deputy supervisor and the vehicle maintenance side who do not work on these premises. They have my authority so that they can do something to a

certain limit without referring back to me. But of course these will not be very important decisions, for decisions involving a large sum of money or the deployment of labour, they will need to refer to me."

[Do you think that you have an authority which matches your responsibilities?]

"It's quite difficult. I sometimes feel that I have too much responsibility without the necessary authority."

[Has this situation come about because you have an intermediary between you and the managing director: you have a general marketing manager, so you are insulated in a sense?]

"yes."

[What happens if a subordinate of yours finds it difficult or impossible to comply with authority. How do you or the company handle this?]

"It depends. If the person is a direct subordinate of mine I would endeavour to solve the difference by some sort of consultation or at least talking to him. If it is more or less an indirect subordinate, then usually we will take disciplinary action."

[Can you take that action without reference to the personnel department?]

"Usually we will involve them, especially if the action is taken in writing, but not if it is just a verbal warning. Sometimes we only refer to the personnel department afterwards, when it is a matter of record and we will send the personnel department a copy of the letter after the event."

[Is this procedure followed because you are a small company or because the status of the personnel department here is not very high?]

"I guess it is to do with the status of the personnel department.

I don't think there has ever been any written procedure on this kind of thing that we must refer to the personnel department before taking any action."

[How would you describe the kind of authority which you exercise within the organization?]

"Within the company generally it is autocratic rather than democratic, and that goes for myself as well. Of course it does depend on the type of decision being made; usually when it is important it tends to be autocratic. The participation by subordinates is more by the way of giving ideas in the very early stages prior to the final stage of decision-making."

General Sales Manager

[How do you see the nature of authority given to you?]

"I see authority as one of two types. There is the official authority given by the organization, in effect that which is vested in the position of the manager. Then there is the unofficial, but real, authority which is exercised by the person himself, which is there because of the need to work through people."

[Do you work a great deal through subordinate supervision?]

"Yes. As you see I am French and do not speak any Chinese. So my authority really has to be translated down through three subordinate sales managers, who in turn have 50 sales representatives, apart from

development engineers, product engineers and clerks. It is a kind of authority by proxy. I have to delegate a great deal."

[Authority has been described as autocratic, democratic or laissez-faire. How do you see yours?]

"I would say that it is two thirds democratic, and if anything tilted a little towards the autocratic. It is certainly not laissez-faire on grounds of my personality and the chinese setting in which we are working."

Personnel Manager

[The nature of authority in the personnel function.]

"The personnel manager here plays the role of adviser and co-ordinator and therefore does not have very much direct authority in certain matters. Departmental managers have a great deal more authority than I have."

[What is your role when an employee fails to comply with a manager's authority?]

"It is usually the divisional head that raises the problem and then we discuss the matter to find a possible solution. The departmental head is the one to take the action, but we in personnel act as the third party in talking to the problem employee."

Power as a social construction.

The study of organizations has been guided in many instances by a succession of rational and functional theories, often allied with positivist methodology. Most notably in recent years the detailed

measures of the Aston Studies (Pugh & Hickson, 1976), covering aspects such as formalization, functional specialization, centralization, as well as size, dependence and technology, have been based upon the notion that certain features of organizational functioning can be measured objectively. These and other efforts have proceeded on the basis of an uncritical acceptance of the conceptions of organizational structure shared by the participants. The positivist defence of this position would be that certain phenomena are there in organizations and hence their classification is a question of tapping reality, which depends on the rigour of the method used. Howton (1969) took this perspective of organizational life to its furthestmost in envisioning the extension of the core processes of rationalization and functionalization to whole societies; thus, in his view the society would become a large organization with carefully articulated parts contributing to overall objectives.

It appears that the material functions of organizations will continue to attract attempts to measure and classify them. However, their methodology diminishes in utility when it comes to dealing with the social, inter-personal aspects of organizations, where power and authority lie deeply embedded. Social construction refers to the constant creation of the social world performed by individual people - by means of interaction with one another, and by means of building and re-building, institutional structures. Power, like the organization itself, is always in a state of becoming; it is not a fixed and determinate entity. Power, alongside goals, structural arrangements technology and the inter-personal arrangements within an organization, is an outcropping of the process of social construction.

The argument advanced thus far draws upon the first of four principles of Marxist dialectic analysis - social construction - as

the basis on which power is exercised and evolved continuously within the organization. This form of analysis attempts a comprehensive definition of social forces at work, linking the organization to a perception of society. The second of the principles - totality - means that social structures are illuminated in their capacity as forming parts of a larger whole, rather than being discussed as an isolated abstract phenomenon. As Benson (1977) describes, the idea of totality moves through the intricate ties of organizations to the larger society, and not only to the macro-structural features such as economic and political systems but also to the everyday lives of individual people. The third principle of the dialectic way of thinking - contradiction - refers to the proposition that social construction does not form a rationally governed, centrally supervised process. Despite the efforts of leaders and administrators anxious to remain in charge of the process, some of its components end up beyond the sphere of rational control. It is postulated that certain contradictions are generated within the organization, for instance as a result of the division of labour, and the various structures dispensing rewards or exercising control. Individuals and groups in different positions, working under different conditions, can develop views and patterns of action which go against the predominant rationality. The final principle is called praxis, which stands for the free and creative reconstruction of social conditions on the basis of rational analysis of the limitations and opportunities inherent in social forms. This principle rests on the assumption that people have the ambition and capacity to reconstruct social situations based on their rational analysis and role as active actors, and of their view of certain circumstances.

The purpose in so illuminating the four principles of dialectic analysis is less concerned with the relevance of this theoretical path to the writer's encounters within Oriental Products Ltd; or indeed of the pursuit of any marxian ideas which are normally associated with the process. Rather is the position adopted by the writer based on the independent stance that encounters were pursued with the principal actors in this organization, and that in the process certain elements of dialectic analysis appeared to be relevant. Benson (1977) and Burrell (1980) never intended their version of radical organization theory to be pursued by field studies, which are so evident in the predominant conceptions of organization theory. The motive source of radical or critical organization theory is the marxian perspective on economic, political and ideological social structures, the notion that power is vested in the ruling elite in an organization, and that the task at hand is to explore the philosophical and theoretical problems associated with challenging the status quo and alternative organizational forms. To the extent that the dialogue reported earlier in this chapter was conducted with the seven most senior actors, and not everyone, in the organization, it could be said that attention was focussed upon the ruling elite who were representative of management interests.

No interviews carried out with the principal actors in Oriental Gas Products could do justice to the principle of social construction, since by its very nature it is not possible to embrace the process of interaction, building and re-building institutional structures on a continuous basis. Instead the encounters with the managers were a fleeting glimpse of the social process, with the greatest scope granted to the participants to reveal their thoughts and even, if they

so wished, to control the exchange in terms of the agenda and the time spent. The purpose of thus handling the interviews was to see how the manner of personal conduct and willingness to discuss the phenomenon of power was relevant alongside the sentiments expressed. Although the encounter itself was a partial expression of social construction, the attempt was made to treat the interviews as an exercise in the use of the actor's power as much as their perception of their use of power and its effect on them.

The second of the dialectic processes - totality - is an example of a principle which is barely questioned from a theoretical point of view but which even from extended encounters with the principal actors would be impossible to define. Few would deny that a structure in its development and perceived form is part of a larger concrete whole rather than an isolated, abstract phenomenon. Defined in this sense, power is not only the relative power positions which are evident in the life of one person, both in and out of the working situation, but the moving inter-relationships of power between the principal actors in the organization. Totality is, therefore, a theoretically comprehensive concept in the discussion of power, but in practice a shifting sand which it is impossible to arrest in definition.

The third principle in the dialectic view - contradiction - was evident in the dialogue with the managers of the organization, but not in the conventionally described mode. As put succinctly by Benson (1977), "The social order produced in the process of social construction contains contradictions, ruptures, inconsistencies and incompatibilities in the fabric of social life." I shall argue that such contradictions and inconsistencies that were perceived were evident largely in the perspectives of the principal actors in rela-

tion to their own power position in the organization. As with totality, contradiction may be allowed as a theoretically comprehensive concept; for few would argue that there are not numerous contradictory elements in any society. The greatest problem in this context is to come to terms with the totality of contradictions in the ordinary social encounter, and for this reason a limited perspective is taken of this third principle of the dialectic approach.

The final principle - praxis - presupposes that the actors in the situation are willing and active agents in reconstructing their own social relations and ultimately themselves on the basis of rational analysis and an ethical commitment. To some this principle may be taken as the basis of the regeneration, if not the revolutionising, of organizations and society at large; or at least the releasing of human potential through the production of new social formations. The writer's encounters with the managers of Oriental Gas Products suggested that praxis was evident in the minds of the actors, but only subtly on the surface of the organization. A major limitation on the exercise of praxis by individuals was the formal framework of structure, which established limits to authority, spheres of action and the main lines of accountability. For those who were subordinate to the managers the opportunities for social reconstruction were very limited indeed. The restrictions on praxis by the organization were so considerable that the outcomes appeared to the writer to be either in the minds of the actors - a belief that certain things were other than formally ordered within the structure - or appropriate effort for life outside the organizational setting.

Power as perceived in and through actors.

The scenario which presented itself in terms of power in Oriental Gas Products can be described in two contexts. On the one hand, it was clear that the Weberian concept of bureaucracy and power was consciously or unconsciously held by the seven managers who constituted the elite of this organization. To a large extent the actors revealed support for the view that they held their place in a bureaucracy stemming from overall rational-legal legitimation, requiring a form of obedience to the superior as an end in itself. They perceived their authority as based not only on expertise but also on sheer incumbence in office. The second context which became evident during the encounters was the more personal, idiosyncratic version of power which could be said to make up the "underground" view of this phenomenon. It was in this area that two out of the four dialectic principles - social construction and contradiction - were apparent in the conversations with the managers.

In every organization, including those which eschew a formal structure, the construction of social arrangements is going on all the time. An attractive feature of this approach is that it challenges the notion that organization structure is a static state, subject only to periodic formal adjustments announced by senior management. If we were to rely solely upon the formal enunciation of power, in many organizations including Oriental Gas Products it would consist of an announcement of appointment followed by the pattern of behaviour by the individual stemming from this situation. The "underground" perspective of power referred to above was seen as the personal interpretation put on this formal brief by individuals which might vary greatly depending on the nature of the incumbent. Informal and

personal perceptions of power positions were apparent which did not always fit with the level of the individual in the structure as perceived by the outsider. Undoubtedly these views were in part formulated by the personality of the incumbent, age, sex, experience, length of service with the organization, social position, as well as the nature of the responsibilities undertaken and other factors. The notion of formal power and informal perceptions about it should come as no greater surprise to us than the much-explored dichotomy between formal and informal organizational functioning. Benson (1973) characterised the interplay between formal and informal forces in the following way:

"People are continually constructing the social world. Through their interaction with each other social patterns are gradually built and eventually a set of institutional arrangements is established. Through continued interaction the arrangements previously constructed are gradually modified or replaced.....

Social arrangements are created from the basically concrete, mundane tasks confronting people in their everyday life. Relationships are formed, roles are constructed, institutions are built from encounters and confrontations of people in their daily round of life. Their production of social structure is itself guided and constrained by the context.....

An important constraint is of course, the existing social structure itself. People produce a social world which stands over them, constraining their actions. The production of social structure, then, occurs within a social structure. There are powerful forces which tend to occasion the reproduction of the existing social structure. These include, as prominent elements, the interests of particular groups of people and their power to defend their interests within

an established order. Nevertheless, the efforts of people to transcend their present limits bring them eventually into conflict with the established arrangements and lead to social change. Sometimes the process is not planned and coherent, for example, where in reaching for higher levels of material productivity people go beyond the limits of present social arrangements. Sometimes, however, people may come to understand the limits of social structure and purposely rearrange it, a process termed "negation of the negation" (Markovic, 1974)."

The process of social construction contains within it the seeds of the second dialectic principle perceived in the encounters with the managers of Oriental Gas Products - contradiction. The conventional wisdom of the marxian emphasis on contradiction indicates that social construction itself contains contradictions, ruptures, inconsistencies and incompatibilities in the fabric of social life. Therefore, radical breaks with the present order are possible because of these contradictions. A typical Marxian application of this principle would be that capitalist social formations are antithetical to the interests of labour and that the functioning system maintains or reproduces this contradiction. This example presents us with a political statement which no marxian theorist would deny. It also serves to illustrate the dilemma which confronts the social scientist more than his counterpart in the natural sciences, viz the nature of a social situation inviting political conclusions to be drawn. Insofar as the writer has identified the seven most senior people in this organization as an elite it could be concluded that a kind of political statement has been made which might be agreed by more than those who strictly adhere to the dialectic approach. However in general no political stance was con-

sciously adopted by the writer in the pursuit of defining power and no a priori views were held on the role of managers in this organization using such contradictions as were present as a means of reforming the structure of Oriental Gas Products.

It could be argued that since the selection of actors for dialogue was drawn from the managerial elite of the organization the chances of a serious form of contradiction appearing would be minimal. Such actors do not use their power to contradict in order to bring down the organization, but rather to undertake their work effectively and in doing so to maintain or improve their power situation in the organization. Such action may extend to patterns of behaviour aimed at securing the top position in the organization or directly or indirectly doing another person down in order to secure an advantage.

The meaning of encounter

As the writer pursued the encounters of an essentially qualitative mode of enquiry, it became clear that the act itself, the interaction with the seven most senior executives, was an entry into the power process. Compared to the total life span of the organization, the meetings were fleeting. Yet it was impossible to ignore the feeling that the interviewer, however much seen as an outsider, was touching upon a highly sensitive area in the discussion of power. In comparison to the measurement of social phenomena by standard statistical techniques, the very agenda for discussion under the general framework of power was set by the interaction of the personalities. The only standardised part of the encounter was a mutual understanding of the relative position and accountability of the manager in the formal organization structure. The organization charts showing the changing accountability between 1980, 1982, and 1984 were a way of

demonstrating how power shifted in this organization. So too were the innumerable decisions taken by the managers or groups of them affecting the allocation of resources, the acquisition of new resources and the utilization of manpower which, together with the nature of the market served, resulted in that demonstration of the power of the organization - the gradually increased turnover and profit of the company over the years.

In order to embrace the element of "agreed agenda" as well as the interaction of personalities in the encounters, an attempt will be made to re-interpret the interviews described earlier. Seen in this wider context, the encounters reveal other features of the interaction between two personalities under the general heading of perceived power. They are also a fleeting glimpse of the actors involvement in two of dialectic processes - social construction and contradiction. Social construction is seen in part as the actor's attempt to create the reality of power seen through his or her eyes and the presence of a second party. Contradictions are evident mainly in certain statements in the encounter which do not logically follow each other, this forming part of the wider commentary more common in the marxist dialectic analysis, which emphasises discontinuity within an organization leading to a similar effects in society at large. The re-interpretation of the encounters also revealed certain differences between the managers which could be described as cross-cultural in origin: a dimension which will be explored later. The re-interpretations are shown in the same sequence, as earlier recorded.

Managing Director

An Englishman, with considerable experience of working abroad with the parent company of Oriental Gas Products. His perception of

the power vested in his position was classically Weberian, although in passing he made reference to the "less questioning" environment in an oriental organization, the fact that the initiative of subordinates was not crushed by his presence, and that technical competence would carry weight at whatever level in the organization it was being exercised. The devolution or delegation of his authority down through the organization was clearly a part of this manager's social construction, involving the handling of disciplinary matters on his behalf by subordinate managers, except in the most serious cases and the grading of financial responsibility according to the individual's standing in the organization. For more than any other manager in this organization, the managing director's social construction is the company itself. Nothing emerged from the encounter to suggest that the power perceived in his position was challenged in any way or that, short of market fluctuations and the availability of labour, situations developed within the organization which were in any way contradictory to the framework of power ascribed to the chief executive. So firmly was this point established that the managing director could afford to be extremely relaxed in his discussion about, and the exercise of, power in his position. This gives rise to the exercise of "implied power", or the notion in people's minds that a senior person has the capacity to do something but does not necessarily have to intervene or remind others that he can bring something into effect in order to secure compliance. Whereas for lesser managers in the hierarchy the natural reaction to a failure to secure compliance is for the person to fight on, adopt different tactics or invoke higher authority, the inference for the managing director is that he should cease to do the job if the non-compliance is serious or of a consistent nature. For

the managing director of Oriental Gas Products there was more to fear from a loss of power in company turnover and results than non-compliance by subordinate managers or the workforce in the path towards those results.

Finance Manager

A young chinese man, who had risen through the ranks of the commercial side of Oriental Gas Products to this key position in the organization. He displayed an identification with the notion of "implied power", without portraying the comprehensiveness of the managing director in this respect. His social construction could be defined in terms of the central importance of the finance function in the running of the business. If we accept this as a structural view of power flowing from a function, there followed in the encounter with this manager a major contradiction of views expressed, not so much in the classical marxian sense of challenging the status quo, but in the more ordinary view of self-contradiction. The manager began by stressing that he got things done by relying on his personality and the respect which he elicited from those more junior to himself. He then went on immediately to state that his power stemmed from the organization rather than his personality. This position was then qualified by a re-assertion that personality had a role to play. And then, the structural aspect was further emphasized by the power which the finance manager had over an employee in respect of the size of salary increase which could be awarded or withheld. Some would argue that given the speed with which these alternatives were proffered they were truly contradictory: others would stress that they were complementary in their nature. The encounter with this manager revealed a basic and

rather traditional view of the source of his power.

General Marketing Manager

A relatively young chinese executive, american-educated, who was in direct seniority to the General Sales Manager and the Distribution Manager. (He was subsequently to rise to become the next Managing Director of Oriental Gas Products). He saw power essentially in the Weberian sense as stemming from the individual's position in the organization. Although power was centralised through the office of the Managing Director and the latter's style tended to affect subordinate managers, he stressed that departmental managers had a high degree of freedom in the running of their departments. In recent years the management of this concern had encouraged a greater degree of participation in decision-making among its employees, and to that extent power had been devolved amongst employees, although certain hard lines had to be drawn, such as in the maintenance of standards for customer service. The social construction of this manager's view of power was clearly the devolved authority stemming from the chief executive's position, tempered by an acknowledgement of the need to commitment rather than confrontation with the workforce through consultation. The discussion with this manager revealed that he possessed an extremely considered opinion of the subtleties of compliance by employees and of the need for this to be matched by the appropriate use of managerial power and authority. In terms of his personal position within the organization, he gave the impression of being the logical "heir apparent" to the Managing Director, although as we shall see this assumption did not go unchallenged by at least one of his senior peers.

Operations Manager

An english women, trained as a chemical engineer, with nearly

ten years experience in this position in the company. Hers was the most confident assertion amongst all of the managers in Oriental Gas Products that her power was rooted in her technical competence and expertise. This point was especially emphasised in respect of her relations with the Managing Director, who did not have a technical background. Power was seen to be shared by individual managers, coordinated by the Managing Director. At the same time, this manager was of the view that individuals can have a great impact on the nature of power which they exercise, to the extent that in a relatively small organization the structure was moulded around the personalities. A direct correlation was seen to exist between the size of the organization and the degree of power which could be exercised. The larger the organization the greater the pressure for people to fit in with structure. The smaller the organization the relatively greater the power amongst managers in return for the somewhat restricted career opportunities. This manager had witnessed the reorganization of Oriental Gas Products every two or three years essentially, to use her words, "to fit the personalities". It was clear that the Operations Manager saw herself in a powerful position by virtue of the key operational function which she headed. Although the scope of her personal and professional ambitions were never fully articulated, it was obvious that her social construction was largely tied into the use of her technical expertise and a personal desire to see her power equated with that of the Managing Director. Apart from the Managing Director, she was the only other person in the organization with a background of working in at least two other countries with the parent company and seemed to be sending out the signal that if her power was in any way

limited in Oriental Gas Products it could possibly be realised in the broader international setting.

Distribution Manager

A young chinese executive with several years experience in the organization. One of two managers accountable to the General Marketing Manager, he was therefore one removed from the chief executive. A sense of subordination came through in the encounter with this manager, reflecting his awareness of restricted power in the overall organization and, not least, the reality that distribution was part of the overall marketing function. Power was perceived to emanate from the organization, although this manager saw it as a relatively centralized phenomenon in the hands of the few others who had direct access to the chief executive. This led to a feeling of ambiguity in his mind over where he stood in the organization and that only part of his power had ever clearly been expressed to him. The nature of distribution work meant that a great deal of his authority was delegated to subordinate supervision and to individuals on the workforce who spend considerable periods of time away from the plant. In turn this gave rise to the feeling that in numerous instances the authority which he had did not match the responsibility which he possessed. By a combination of function, seniority and geography, this manager felt that elements of power above and below him were in the hands of other people. The reality of his world was to carry out his job as best he could given the location of certain types of authority beyond his hands, particularly in the senior realm of decision-making.

General Sales Manager

A frenchman, with a background in a subsidiary of the French co-parent organization with 50% ownership. The interview with this

executive was an extremely difficult one, characterized by a barely-concealed lack of tolerance for the interviewer and the nature of the subject being discussed. The reasons for this curtness could have been a suspicion that the interviewer was a "plant" of the management (the only time experienced during the encounters), a sensitivity in communication (a relatively poor command of english and absolute refusal to be tape-recorded), or a natural antipathy to being spoken to on matters such as power and authority in the work situation. The interviewer also came away with the impression that this manager compared his situation of being two levels away from the Managing Director with that of the only other french executive in the company some years earlier, who was more experienced and in the more senior role of Deputy Managing Director, responsible for the general marketing function. Whatever the underlying reasons behind the atmosphere which developed the encounter provided the richest experience of immersion into the power process itself in the limited tolerance for the agenda as expressed, which was significant in its own right. The perception of power which emerged from this setting was nothing if not succinct. Power had two sources - the organization granting "official" power, and the individual, the source of unofficial, but "real" power. The cultural background of this executive and his inability to speak chinese meant that his power had to be delegated to supervisors in this direction of some 50 sales representatives. Although he characterized the use of his power as mainly democratic in style, he did admit that in extreme situations requiring things to be done the autocratic side to his character came through.

Personnel Officer

Although directly accountable to the Managing Director, this Chinese executive had the lowest status amongst the members of the management team. He freely admitted his lack of power in the hierarchy and described his role as essentially advisory and co-ordinating. Even in the recruitment of employees and in his involvement in staff problems he saw himself as a mediator with authority subordinate to that of line managers in all situations. As a consequence he was not incorporated into the decision-making process of this organization. Such power as was evident in this position was as an intermediary to those who possessed power in the organization. A perspective on power expressed.

The interviews created an unusual situation in the sense that people more commonly spend their time assessing, initiating or receiving the effects of power than in discussing or publicly analyzing it. It was taken for granted that each of the principal actors involved possessed a form of power conferred by the organization by virtue of the managerial position held and that this possession was given tacit or overt approval by the wider society. Reference was made earlier to the fact that in conducting the interviews on the theme of power I was conscious of being involved in a dual process: the expression of perceptions about power by the actors, and, to a degree, an entry into the power process itself. Each of these processes has built into them a potential weakness. In the case of the expression of a perception by an actor there was the inherent danger that a convenient or "cosmetic" response could be given if for some reason the real feeling could not be expressed. In

the case of the entry into the power process itself, there were the divergent possibilities that either the interviewer could be perceived as a threatening outsider with a special power in relation to the enquiry or as someone with no status within the organization, and therefore not to be taken seriously. Since either of these two possibilities might be said to have the potential for conditioning the pattern of responses they could not be dismissed from the reckoning. On the other hand, I took the position that any methodological approach to an organization such as this had built into it difficulties such as described, and that this was not sufficient reason for avoiding the work altogether. The fieldwork was for the most part carried out in an atmosphere of friendship and mutual trust and I perceived the dangers outlined above to be minimal.

Essentially the interviews presented a mirror of or partial illumination of the power vested in the manager as well as that involved in the position occupied. To describe the interviews as a vehicle for power was only valid insofar as it was revealed in the interplay between the manager and that person's perception of my status as an enquirer from outside the organization. The absence of any standardized measurement techniques in the encounters meant that the phenomenon of power could not be encapsuled in this organization as a series of statistics, as has rarely been attempted. Power is portrayed as a mosaic of capacity to initiate events through the eyes of the people who were invested with it by the organization and, in a broader sense, society.

The power which was displayed in Oriental Gas Products was evident in the sense that it was being used formally and informally by

the principal actors on a day-to-day basis. The interviews revealed that power was not evenly perceived by the manager and his peers, and, it may be concluded, is not a finite or fixed commodity. The different patterns emerging from the fieldwork, as well as the earlier definition of peer perception, suggest that in addition to the philosophical considerations discussed earlier, a number of practical factors affect the situation at ground level. Extracted from the variegated nature of the interviews carried out, these conditioning factors were seen by me in one of two categories:

a) Primary Factors.

- (i) The position of the respondent in the organizational hierarchy. This perspective on power was most obviously the case with respect to the Managing Director. Regardless of the personalities involved, there is no doubt that seniority in the organizational hierarchy accounted for a great deal. As we saw in the interviews, those who perceived themselves to be on an even par with others were capable of disputing the relative power of the others (see especially the perspective of the Operations Manager), and the responses of their subordinate managers reflected in fair measure their position in the hierarchy. To some it may be stating the obvious that position in what is commonly referred to as "the pecking order" in the organization is synonymous with the power held. My findings are that whilst this may be generally true, the situation is subject to a number of questionings of a formal or informal nature,

which demonstrate special aspects of power which are not explained away by the relative positions on an organization chart.

(ii) The age and experience of the manager within the company.

One of the advantages of associating with an organization for a lengthy period of time, and in this case witnessing three distinct organizational profiles, is that the observer was able to track the way in which the power was emanating from the age and experience of the managers in relation to each other varied over time and was a factor in the overall power situation. In this sense the organization does no more than to mirror the situation which is common in society at large. If we accept the notion that power is sustained or diminished by the "successes" or "failures" that occupancy of a responsible position brings with it over a period of time, depending on the nature of the organization, there would appear to be an element at work sustaining those who exercise power with successes involved and limiting or dismissing those whose power initiatives result in successive failures. In the case of Oriental Gas Products it was not apparent that any of the seven principal actors exercised their power consistently to either of the two extremes described.

b) Support Factors.

(i) The specialist nature of the managerial position occupied.

Apart from the over-riding power which was apparent in the position of the Managing Director, it was clear that

a contributory element to the power exercised was built into the specialist nature of the job occupied. This was particularly evident in the case of the Finance Manager, whose presiding over the budgets and costs of all departments brought with it a special kind of power which was all-pervading and (in his view) paramount to the working of the organization. The Operations Manager was responsible for all production, engineering and maintenance. Given the largest element in the workforce and the central importance of the work, this position had a great deal of power built into it by virtue of the command of people and resources. At the other end of the spectrum, the Personnel Manager's role was minor since the function had been defined as a recruitment and largely clerical one and there was no industrial relations role of any significance.

- (ii) The personality of the manager. Traditionally spurned by organization theorists as a minor aspect of contingency or cast in to an ill-defined "garbage can", the individual qualities and personality of the manager are not always invested with the dignity of relevance that they deserve. Since the essence of power is seen in the interaction of people, the personality of those in positions of authority cannot be written out of the script. The degree of energy, initiative, drive and application in claiming the power which is vested in the position of a manager is seen as an important support

factor in the exercise of power in this organization. The conventional wisdom of many organization theorists is that a person in a position of authority claims the amount of power which is appropriate to his position in the structure. My experience of encounters within Oriental Gas Products is that there are discretionary limits within which power can be claimed in greater or smaller measure than may be seen in the positioning of the managerial job, and that the personality of the manager is a key element in the extent to which degrees of power are claimed or spurned in the interaction with other people within the organization.

Power in reality.

Pfeffer (1981) drew a distinction between substantive and sentimental outcomes of power. The former are physical outcomes and depend largely on what the author described as "resource-dependency considerations". The latter refer to the way people feel about the physical outcomes. These are mainly influenced by the symbolic aspects of power - the use of political language, symbols and rituals. Within this organization the visitor first encounters the substantive elements of power - the nature of work being carried out, the material results both physical and financial, the relative positions of managers in the organizational matrix, the technical skill and experience possessed by the manager and the day-by-day decisions whereby power comes into effect. The personality of the manager is also to be taken into account in the discussion of the substantive elements of power. It is indeed tempting to embrace the substantive aspects of power as the one true representation of what is going on in this area. To maintain an adherence to this approach would entail the recording of

all facts relating to the work of the organization, together with the respective "victories" and "defeats" of key individuals. The limitations of judging power in this way are all too evident when the outcome of a situation does not always match the true degree of power possessed by the individual.

The spirit of the pursuit of power in our enquiry into Oriental Gas Products owes more to the tradition of the sentimental outcomes of power and to the perspective of phenomenology (Schutz, 1972) than to the measurement of outcomes. An hypothesis which is central to the approach is that just as there are multiple realities and perceptions of reality, so the perceptions of power depend on the agenda set down by the individuals. It is also postulated that power is vested largely in the group of seven senior executives who make up the highest echelons of management. They not only constitute an elite who are responsible for taking most of the decisions which affect the working of this company, but are able to define reality for others as well as themselves. This idea is not advanced on as broad a basis as certain Marxist writers who saw such elites as being in control of the mechanisms which "teach" us our values, beliefs, attitudes and which use the media, education and other information channels to formulate opinion. The managers in question are seen as representatives of an "ideological hegemony" (Boggs, 1976) who set the tone for thinking about reality within their organization rather than having control in a broader societal sense. The adoption of this view by the writer means that Lukes' (1974) concept of the third dimension of power, to condition thinking and to prevent issues and conflict arising in the first place, was not seen to be wholly relevant in this organizational

setting. Such a capacity for shaping values, preferences, cognitions and perceptions so that grievances do not arise or if they do are not articulated was more evidently located in the society of which Oriental Gas Products was a part than its elite class of managers.

We have earlier considered the One-Dimensional Approach to power which was put forward by the pluralists (Dahl, 1957, 1961; Parsons, 1963, Polsby, 1963; Wolfinger, 1971). Here the focus is upon the strength of the decision-making process and the exercise of power by one party over another in key issues and decisions when conflict is clearly observable. If conflict does not exist, consensus is assumed to prevail. Although this is a somewhat narrow definition, its application in the setting of Oriental Gas Products is not in question, particularly in the role of the Managing Director and to a degree in the technical spheres of competence of those managers accountable directly to him in the fields of finance, operations and marketing. The One-Dimensional Approach to the definition of power has rarely been attacked in terms of its intrinsic validity, more in relation to its lack of comprehensiveness in covering the landscape.

Bachrach and Baratz (1962, 1963, 1970) were amongst the early writers to take issue with the pluralists' approach. They contended that power, rather than simply being exercised within the decision-making processes, is used to exclude certain issues and individuals from that very process. This approach turned the position of the pluralists on its head, limiting the role of subordinate people, confining decision-making to safe issues, and in effect making outcomes a result of nondecision-making. The Two-Dimensional Approach, as it is known, should not be seen as contradictory to the One-Dimensional

Approach; rather is it complementary and equally non-comprehensive in its definition of power. The structure of organization and inter-relationships between senior managers in Oriental Gas Products gave indications of the use of the Two-Dimensional Approach, especially in the exclusion of the Sales Manager, the Distribution Manager and the Personnel Manager from the "inner enclave" of consultation amongst the four most senior managers. Despite certain comments from some managers about the increasing democratization of this company, it was clear that exclusion from decision-making widely affected the supervisory level, a position which was underlined by the absence of any trade union activity in the concern.

Hardy (1985) usefully welds these definitions of power into the dual typology of overt and unobtrusive power. The definition of overt power draws together the capacity to produce favourable decisions (the pluralist approach) and to keep dangerous issues out of the arena (non-decision-making) in a way that emphasizes that the sources of overt power are grounded in the differential access to material and structural resources (Ransom et al., 1980). Since these resources are differentially distributed, some actors are more dependent upon others for access to them, and hence dependency relations confer power onto those providing resources (Emerson, 1962). Pre-eminently the Managing Director of Oriental Gas Products possessed in considerable measure the strategic resources on which others depended and which allowed the political actors responsible to him to influence decisions, agendas, resource allocations and the implementation of decisions. Also filtering down through the Managing Director to immediate subordinate managers were other sources of power such as access to information, expertise, as-

essed stature, control over rewards and punishment (French and Raven, 1968; Pettigrew, 1973).

The unobtrusive power referred to by Hardy (1985) is the ability to secure preferred outcomes by preventing conflict from arising, thus drawing on elements in the Two and Three-Dimensional Approaches to power. This definition was particularly relevant in the encounters with the managers of Oriental Gas Products since these political actors were inclined to define their success, not so much in terms of winning in the face of confrontation (where there must always be a risk of losing), but in terms of their ability to section off spheres of influence where their domination is perceived as legitimate and thus unchallenged. The theme of legitimacy and power through the very holding of office, stressed in its early form by Weber (1948), was one of the most commonly held perspectives on power held by the managerial elite of this organization. On a day-to-day basis it could even be said that overt power was less in evidence than unobtrusive power. Both are concerned with and lead to substantive outcomes. However, unobtrusive power has a subtle quality in manipulating symbols and language to produce sentiments amongst individuals and groups. These sentiments are then harnessed by the more powerful managers to endow their actions or proposed actions with legitimacy in the eyes of other individuals or groups, and therefore are unlikely to be questioned or opposed. The essence of unobtrusive power in this, as in other business organizations, was the ability to give meaning to events and action, and to influence the perceptions of others so they either remain unaware of the implications of political outcomes or view them in a favourable way.

Salaman (1980) amongst others argues that the source of unobtrusive power is the ideological hegemony of the wider society from which elites draw their strength. It would be redundant to argue that this does not happen, and elsewhere in this thesis the point is developed that cultural inputs from society have an impact on managerial behaviour. We should not be surprised that the managerial elite in an organization reflects the values of certain societal mechanisms. However, even Salaman (1980, p. 29) acknowledges "that despite the "success" of such societal mechanisms, the extent of quiescence, resignation of class consciousness varies from plant to plant, industry to industry, region to region". Whilst power is institutionalized in wider society through structural and cultural arrangements, whilst bias is mobilized and anticipated reactions manipulated at the societal level to benefit dominant groups, there was no evidence to suggest that the behaviour of the managerial elite in Oriental Gas Products revealed a powerful link between society and their managerial initiatives.

It was concerning the wider connection of society, its purpose and effect on the organization, that the marxist dialectic analysis was looked at to determine its relevance to the discussion of power. Amongst the various theoretical approaches to power the dialectic most obviously pre-supposes a political stance in some, if not all, of its frameworks. Two of the more neutral frameworks within which power was considered were those of social construction and totality. The managerial elite in Oriental Gas Products were undoubtedly constructing their social world on a continuous basis and building their social patterns and institutional arrangements by virtue of their social interactions. Here one was aware of the infinite nature of the process, be-

ginning with the day the organization was first constituted as a joint venture. Emanating from the social world of the society which created this company, the relationships underpinning power were formed, roles were constructed and institutions built from the encounters and confrontations of people in their daily round of life. The managers are themselves products of the social world which stands over them, and so it was quite natural that they should bring in with them some of the values of the wider society and possibly the interests of a group or groups from society. What was not clear from the encounters with various individuals was the extent to which specific inputs in the power process were attributable to factors in society. Indeed, some values may have been imported without any conscious effort on the part of the actors. This assertion is also at the centre of the other dialectic process, totality. It must follow that if people produce social structure they do so within a social context, and hence all social phenomena should be studied with reference to the multiple interconnection of relationships. Whilst this is a theoretically attractive and comprehensive input of the dialectic, it presents a virtually insoluble situation to work out all of these influences and whether they are truly relevant in the formulation of power. Benson (1977) admits difficulty with this concept. He argues: "The linkages between components are not complete nor wholly coherent. Rather, the processes of social construction take place in unique, partially autonomous contexts. These varying contexts are not centrally controlled and regulated except in rare cases. Thus, dialectic analysis while looking at wholes, stresses the partial autonomy of the components. The

principle of totality, then, expresses a commitment to study social arrangements as complex, interrelated wholes with partially autonomous parts. Analysis pursues the major breaks or divisions of the social structure which occasion divergent, incompatible productions, and the relations of dominance between sectors or layers of the social structure". And so, in Oriental Gas Products totality was there in all its enormity and complexity, contributing to the formulation of power, but nevertheless defying us to encapsule its nature with precision of definition at any one of the fleeting moments of enquiry.

The third principle of the marxist dialectic view - contradiction - creates a situation containing the most obvious political content. It is contended by marxists that all societies produced out of social construction have built into them contradictions and incompatibilities which challenge the status quo and cause radical breaks. In classical marxist analysis capitalist social forms are contradictory to the interests of labour and it is further claimed that the interests of labour will inevitably triumph over those of capital. No such pre-supposition was made in looking at this organization. The selection of the managerial elite as the vehicle for examining power also lays the writer open to the charge that the sample is biased and the political outcomes pre-judged. This position was adopted as the managers were seen as the main agents in the exercise of power; and therefore it was not surprising to see no evidence of contradiction in the sense of challenging the capitalist establishment. All of the managers had a vested interest in not contradicting the basis of the organization and society in which they lived. Contradiction was only evident in the assertion of roles viz-a-viz other managers in what is commonly described

as the field of organizational politics, and in the dismantling of the tenets of the organization from which they drew their living.

The final principle of praxis is seen as the free and creative reconstruction of social arrangements by a form of reasoned analysis of both the limits and potentials of existing social forms. Given the inevitability with which many marxist writers see their cause unfolding, it is not surprising that the terms "rational analysis" and "ethical commitment" are used to describe the process. In Oriental Gas Products the praxis of the elite of managers was working largely by way of a re-inforcement of the capitalist ethic upon which the company had been founded. Whatever factors may have been at work from a broader societal base there were no signs emanating from the managerial elite or from the workforce that a new social order was being created according to the marxist prescription. Such an argument might always be challenged by the notion that "change is always around the corner". Nevertheless we must draw our conclusions from the situation as presented. The praxis of power in this organization came through as occasion alternations in organization structure and accountability, bids for initiative in decision-making based on the relative position of managers in the structure, a continuous consideration of the manager's own positional power in relation to that of the other managers as articulated in discussion, with the overwhelming influence of the legitimate power exercised from his position by the Managing Director.

CHAPTER 5

CONTROL IN THE ORGANIZATION

In the early part of this century, control was one of the five basic management functions which was identified by Fayol (1916). Its original application in business organizations derived from the French usage meaning to check. Subsequently it has received a lion's share of attention in discussions on organization structure, often being used in a broader and looser sense synonymously with the notions of influence, authority and power. This looseness in definition can lead to broadly-based statements which may turn our attention from the separate nature of control as an effect of influence, authority and power. According to Tannenbaum (1968): "Characterizing an organization in terms of its patterns of control is to describe an essential and universal aspect of organization, an aspect of organizational environment which every member must face and to which he must adjust. Organization implies control. A social organization is an ordered arrangement of individual human interactions. Control processes help circumscribe idiosyncratic behaviors and keep them conformant with the rational plan of the organization. Organizations require a certain amount of conformity as well as the integration of diverse activities. It is the function of control to bring about the conformance to organizational requirements and achievement of the ultimate goals of the organization. The co-ordination and order created out of the diverse interests and potentially diffuse behaviors of members is largely a function of control". The broadly-based nature of commentary such as this, replicated in many other sources of the literature, has confer-

red upon control a status which brings it close to the most generally accepted view of what managers do.

At this level of consideration it is not unusual to find, especially in small organization structures, managers who are inclined to equate control with close direction. The reasons for a reluctance to delegate authority to subordinates may be many and complex, ranging from the personality of the manager in question, the nature of the work in question, to the kind of subordinates available. The traditional view of control, therefore, is that it is essentially imposed from above and does not stem from an individual's sense of personal responsibility in the job. From a structural point of view this attitude is embodied in the practice of centralization, in which many imperatives of work are initiated from the top and the success or otherwise of their working have to be reported back to that source. The notion that control emanates from the higher position within the organization is embedded deeply not only in the historical development of managerial attitudes but also in the literature. Goodrich (1975) traced the struggle between management and workers in the early part of this century over the "frontier of control". From a practical perspective the mechanistic ideas of F.W. Taylor (1947) on the means of implementing control in management were given wider publicity than those expressed earlier by Fayol and subsequently elaborated into one of the mainstreams of organization theory. As originally expressed these ideas precluded any possibility of securing motivation and feedback from the people at whom control is directed. An assumption which is central to this position is that feedback from below on the way a control imposed from above may be distorted if the control is

regarded as illegitimate or threatening by the people to whom it is applied. Child (1977) has put the view that regardless of the assumptions which are built in to the application of control, it has become increasingly difficult in large organizations in modern conditions to sustain a centralized "top down" approach to methods of control. The sheer size and diversification of such organizations, together with their attenuated lines of communication, enforce a degree of decentralization within which sub-units generate their own objectives and proposals in relation to control. A great deal of information relevant to the control process is generated through operating units in large organizations, some of it technically complex and specific to the nature of their activities, and this is a further factor in the move away from the traditionally centralized mode of control.

There are numerous areas of overlap in the various considerations of the nature and significance of control. Nevertheless, it is possible to separate and to examine three kinds of emphasis in the debate:

- a) Those who perceive control as synonymous with power or at least closely associated with it, such as March and Simon (1958), Blau (1964), Weber (1948), Dahl (1957) and Tannenbaum (1968).
- b) Those who emphasize that control is one of the structural/technical tasks confronting the management of an enterprise, notably Burns and Stalker (1961), Child (1977), Woodward (1965), Stout (1980) and Simon (1976).
- c) Those who see control in terms of the rules established by society as social or political phenomena, such as Salaman (1981) and Clegg (1979).

The link between the exercise of control and that of power is widely apparent in the literature. Traditionally the concept of control emanating from power has been associated with forms of tyranny, elitism or authoritarianism, or with conflict and struggle. According to Bell (1950) much of this emphasis stems from the works of Aristotle and Machiavelli and is committed to "the image of the mindless masses and the image of the strong-willed leader". This view was also taken up by Bendix (1956), who traced the development of ideologies of management culminating in the work of Taylor (1947), which were in one way or another associated with the subordination or exploitation of workers in order to justify the employers' use of power. Taylor's perspective on the process at work as a result of his work was undoubtedly different in emphasis. Far from stressing the exploitation of workers in his studies at the Bethlehem and the Midvale Steel Companies at the end of the 19th century, he was concerned that workers were not working effectively as a result of badly-organized work routines. In his pursuit of the "one best way to work", Taylor was sincerely convinced that workers would become not only more productive but more happily adjusted to their work. The widespread rejection of "Taylorism" by organized labour in the United States, leading to the legal action in the Watertown Arsenal Case (1911), was sufficient to illustrate that what to some is the legitimate use of control in the work situation is to others the social and political arm of manipulation.

The move away from the traditional conception of control was most evident in the work of Weber (1961) in relation to bureaucracies and Michels (1962) on political organizations. Coercion had played a

prominent role in traditional analyses, consistent with an assumed conflict between leaders and followers. Leaders are obeyed out of fear of punishment or hope for reward. Weber, however, argued that the stability of social systems depends on acceptance by followers of the right of leaders to exercise control. This implied legitimate authority, and Weber defined three types:

- (1) "Charismatic" authority, according to which leaders are thought to be endowed with extraordinary powers, which elicit obedience out of awe. This type of authority is illustrated in its pursuit form by "the prophet, the warrior hero, the great demagogue".
- (2) "Traditional" authority, which pertains to those who are deemed to have the right to rule by virtue of birth or class. The traditional leader is obeyed because he or members of his class or family have always been followed. Its pure type is illustrated by certain patriarchs, monarchs and feudal lords.
- (3) "Legal" authority, which applies to those who hold leadership positions because of demonstrated technical competence. Legal authorities are seen to act impersonally as instruments of the law, and they are obeyed impersonally out of a sense of duty to the law.

Michel (1962) developed a more radical version of the classical conception of control in organizations by suggesting that it must inevitably become oligarchic. He characterized organizations, which may have been set up on the basis of democratic ideology, as inevitably succumbing to the historical process towards oligarchy. His reasoning was that the rank and file, through incompetence and apathy, cannot and do not wish to exercise control: the masses prefer to be

led. He also took the view that democracy is structurally impossible in large and complex social systems: there is no way of arranging the system so that the view of the many individual members can be heard and taken into account. The impracticability of democracy was perceived to be especially apparent in organizations in periods of crisis or conflict with other organizations, when firm leadership and precise adherence to orders was necessary. The tendency towards oligarchy becomes complete as a result of the character of leaders and the role they are called upon to play. Because of their cultural and educational superiority over the masses, leaders form a distinct elite, with perquisites and privileges associated with leadership, which serve further to separate them from the masses. Leaders develop a vested interest in their position, which they must protect. Furthermore, a personal lust for power, which is characteristic of leaders, intensifies their efforts to enhance their power, and leaders resort to ulterior devices towards this end.

Whilst the approaches of Weber and Michels were on different levels, they were similar in stressing the traditional view that the control process is unilateral; one either leads or is led, is strong or weak, controls or is controlled. The simplicity of the unilateral view has been tempered by an emphasis amongst certain writers to the effect that the prevailing order in organizations is threatened by members' lack of commitment to organizational goals and hence it is in need of re-inforcement either through some form of socialization into the dominant norms and values or by a set of "inducements" of various kinds (Barnard, 1938, March and Simon, 1958, Simon, 1969). So the problem of securing order through control is not one of coping with an

incomprehensible uncertainty but with a recalcitrant work force which is orientated to a number of uncertain goals. The existence of a plurality of conflicting individual goals tends to be assumed, and consideration is paid to control mechanisms to cope with them. Individual values are taken to be prior to other social phenomena (Etzioni, 1961, Parsons, 1956). The divergence of goals and values is treated as nonrational, if not irrational by some author (Cyert and March, 1963, March and Simon, 1958). According to this view there is no way of coherently explicating individual's goals; they simply have to be taken as given and an adaptive organizational strategy created. Generally, such a strategy relies on manipulation of perceptions of social reality through control over various resources to ensure compliance with the organizational elite's desires (March and Simon, 1958).

One of the effects of the challenge to the unilateral view of power and control is that the term "power" is rarely used by those who stress mutuality. Alternatively, the problem of the conflict over goals is seen as one of establishing legitimacy and authority and therefore ensuring commitment to "organizational" goals by concentrating on basic values which are necessary for organizational survival and growth. In essence the problem of control becomes a problem of ensuring continuous individual commitment to the organization. Simmel (1971), in spite of a general adherence to the general conflict view of power and control, noted the more subtle interaction underlying the appearance of "pure superiority" on the part of one person and the "purely passive being led" of another: "All leaders are also led; in innumerable cases the master is the slave of his slaves" (Wolff,

1950). Simon (1976) put a somewhat different emphasis on this aspect by pointing to the importance of social approval in the link between power and control. Approval and disapproval represent forms of reward and punishment, but they also merit special consideration because they are frequently dispensed not only by the designated leader, but also by others. Thus, a subordinate may obey a supervisor, not so much because of the rewards and punishments meted out by the supervisor, as because of the approval and disapproval by the subordinate's own peers. Confidence may represent a further basis for acceptance of leaders' authority and hence the degree of control. French and Raven (1960) made a further distinction between the influence of the leader based on confidence by subordinates in the leaders' expert knowledge and "informational knowledge" based on acceptance by subordinates of the logic of the argument that the leader offers. An expert leader, then, may exercise control, not simply because he is an acknowledged authority, but because his decisions, being based on expertise, are manifestly logical, appropriate, and convincing. This approach stresses control by facts as opposed to control by men. Such control by the facts of the situation relies on understanding, and is illustrated by the participative leader who influences the behaviour of subordinates by helping them understand the facts so that they may jointly arrive at a course of action consistent with their own interests and that of the group they represent. Some of these conceptions represent radical departures from many traditional ones, assuming, as they do, an overriding community of interests among all members of the organization.

A further point of departure from the traditional analysis of power and control is evident in the debate over whether the total amount of power in a social situation is a fixed quantity or extendable. As Parsons (1963), amongst others, points out, the notion that power is essentially power over people and that it is fixed as a total to be increased by one party only at the expense of the other, is a "zero sum" concept of power. In addition to Parsons, the generality of the assumption has been questioned by Deutsch (1966), Lammers (1967), Likert (1961), and Tannenbaum and Kahn (1957). The perspective which they proffered is that the total amount of power in a social system may grow, and therefore leaders and those led may enhance their power jointly. Total power may also decline, and all groups within the system may suffer corresponding decreases. The argument would appear to revolve around the perspective of the commentator. If the control is exercised in a limited setting from one person to another, then it may indeed be possible to describe it in a discreet sense as a balance of forces in which one increases at the expense of the other. However, as soon as broader social forces are taken into account their effect may disturb the exclusive balance of this relationship and it may be that other permutations of the power/control situation will manifest themselves.

A further development of the discussion over the conditions in which control may expand within a social system has centred on the concept of an "exchange of resources", as discussed notably by Blau (1964), but also by Deutsch (1966), Homans (1961), Lasswell and Kaplan (1950) and Thibault and Kelly (1959). Within this view, an exercise of control may be viewed as an exchange of a valued resource dispensed by one person in return for compliance on the part of another. The total amount of control or power in a system may therefore be seen as a function of the amount of exchange involving compliance. This amount may change, because the quantity of resources among members changes or

because of a change in the rules (implicit or explicit) regarding exchange. For example, a working organization may encourage social mixing among its staff so that the affectional ties may lead to the growth of social approval as a resource. Hence social systems composed of persons who like one another can, in principle, engage in a greater amount of exchange of approval for compliance than systems composed of persons who are indifferent to one another because this aspect of compliance has been expanded. Even under the most traditional management system exchange would be evident insofar as workers exchange their compliance for pay. In a more participative setting the possibility of expanding exchange outside of pay alone relies heavily on the assumption of broad areas of common interest (rather than conflict) between members and leaders of the organization. (Simon 1957)

Ideas concerning the restriction or expansion of control through the circumstances of the organization have been expressed over a considerable period of time. Allport (1933) put forward the view that control expands within a system through the concept of "partial inclusion". The idea is based on the perception that behaviour in organizations involves only a limited segment of the many needs and potential repertoire of behaviour that define the total make-up of members as individuals. In their roles as organization members individuals do not express the full range of their personalities; thus they are only "partially included" in the organization. Since only a part of the member is included, only a part of him is at the disposal, so to speak, of the organization. Bureaucracy is seen as limiting this range of activities subject to influence, not as a means of restricting members, but as a means of protecting them from undue and illegitimate control. Attempts to enhance members' personal commitment to or identification with the organization are therefore an opportunity to increase the things that fall within the purview of the organization

and the chance for some members at least to increase their control without necessarily reducing that exercised by others. Writers who have suggested a human-relations approach to organizations, based on increasing the sense of identification of members, are promoting both greater inclusion and greater control. March and Simon (1958) were explicit in describing the enhancement of control through a participative system of management:

"Where there is participation, alternatives are suggested in a setting that permits the organizational hierarchy to control (at least in part) what is evoked. "Participative management" can be viewed as a device for permitting management to participate more fully in the making of decisions as well as a means for expanding the influence of lower echelons in the organization."

The "mechanistic and "organic" models of organization, described by Burns and Stalker (1961) and by Shepard and Blake (1961) each implied different degrees of control. The mechanistic organization is characterized by a hierarchic structure of control with a precise definition of rights and obligations of members, as in the traditional bureaucracy. The organic system, in contrast, has a network structure of control. The effectiveness of control in this type of organization, according to Burns and Stalker, derives more from the member's deep involvement and "presumed community of interest with the rest of the working organization in the survival and growth of the firm [other than] from a contractual relationship between himself and a non-personal corporation....." (1961). The network system of control implies a highly integrated system and in consequence the organic organization is more flexible, or adaptable, than the mechanistic. For example, the mechanistic organization may adapt to an environmental change by creating a special group to protect it from change, which

may be relatively isolated from the rest of the organization. In the organic organization, on the other hand, members are more likely to respond and adjust mutually to change. The reaction here is holistic; adaptation is a "concerted response of the firm" in which all members play a part. This highly co-ordinated response of the organic system implies a relatively high level of control by as well as over all organizational members.

The discussion so far has focussed upon control as it is linked to the phenomenon of power and embraces also the areas of authority, compliance as well as the structural implications within the organization. The boundaries between these different aspects are not clearly laid out and even within the same organization may vary over comparatively short periods of time. Given that those who manage organizations invariably use power in one of several of its manifestations in their endeavours to control what goes on in their organizations, we must also examine those aspects of control which are perceived to occupy the central ground of managerial responsibility and which are likely to be technical and structural in their emphasis. Some of the techniques involved in this area already merit volumes in their own right; they include Operations Research, Systems and Network Analysis, Information Processing, Computer Control and Decision Theory. It is not proposed to examine these techniques in depth, for they are the vehicle of the manager's attempt to control, but rather to refer to the structural conditions in which control takes place and the most common means of control, which is embraced by Decision Theory.

Child (1977) most clearly outlined three of the most fundamental choices which have to be made in terms of the structural approach to control: (a) between centralization and delegation, (b) between formalization and informality, and (c) between a heavy supervisory emphasis, reflected in narrow spans of control and a high proportion of managers to total employees, and a light supervisory emphasis.

The term "decentralization" may be subject to a variety of interpretations. It can imply participation or devolution; that is, an extension of control from the top of a hierarchal system to the lower levels. Alternatively, the term suggests divisionalization, which normally involves delegation but not necessarily any significant transfer of control. Delegation is taken to mean an aspect of decentralization whereby authority to make specified decisions is passed down to units and people at lower levels in the hierarchy of the organization. The term centralization presents fewer distinctions of meaning and is seen as a condition where the upper levels of an organization's hierarchy retain the authority to take most of the decisions. Within this broad definition a number of options are possible. For example, it may be sensible to delegate routine operational decisions, but not so likely that non-routine and strategic decisions will be delegated to any marked degree. The focus of centralization may also appear at a lower level if a large organization is divided into divisions each of which are centralized in their own right.

It is clear that both centralization and delegation are strategies for maintaining control and each has certain advantages which have to be negotiated in the light of the circumstances with which the organization has to deal. Wherever centralization occurs control will normally be exercised by confining decision-making to a small group of senior people or even one person: at subordinate levels no one else has the right to act on his own account or discretion. Delegation therefore occurs where decision-making is passed downwards and outwards within the formal structure, but where there are strict limits imposed on the scope and type of decisions that can be made without referral upwards. The disadvantages associated with centralization - the burdens placed upon senior managers in the process, the lack of motivation and development amongst those low down in the organization,

difficulties in making a rapid response to change, and remoteness by senior people from the grassroots of the organization - have been widely noted in the literature. Nevertheless the balance to be struck between centralization and delegation in an organization remains as a positive set of decisions which must be continuously reviewed in terms of whether they are producing the results as sought in the first place. In some works, but notably that of Woodward (1965), such decisions between centralization and delegation were deemed to be influenced by the technology of the particular organization. It was found that in science-based industries, such as electronics, pharmaceuticals and oil there was a greater overall degree of delegation than was found in other companies not handling advanced product technologies and not employing such a high proportion of experts capable of making operational decisions. Technology was not the only factor which was discussed as being contributory to the nature of control in the organisation. Thompson (1967) and Aldridge (1979), amongst others, pointed to the nature of the environment and its relevance to decisions on control because it imposes requirements for certain information to be processed. Child (1977) also noted that where an organization is providing products or services under relatively stable environmental conditions, it may (other factors being equal) be in a favourable position to operate a centralized system of control since its requirements for processing information are relatively routine and probably not too intensive. In such circumstances, decisions can be referred up the hierarchy and any delays this entails may be tolerable. The more changeable the environment of the organization the greater the pressure to decentralize and the need for controls which are speedily adaptive to cope with the situation.

Another aspect of controlling behaviour in organizations lies in the choice made between formalization and informality. The practice is widespread in organizations - particularly the larger ones - to

render activities more predictable in a desired direction by means of written policies, procedures, rules, job definitions and standing orders which prescribe correct or expected action. These formal practices are usually backed up with systems for the documented recording of what has taken place in the way of communication and performance. Such attempts at formalization are not necessarily a move towards centralized control, but may be acting in a complementary way to the conditions where it becomes desirable to delegate. Given that it takes time to establish a highly formalized system of administration and the fact that rules and procedures once established tend to take on a life of their own, formalization would appear to be an approach best suited to conditions of relative stability. Webber (1969) and Child (1977) have also noted that as organizations grow they almost inevitably become more formalized. They characterize the organization which grows to the point where centralized control becomes less and less effective; formalization then serves to establish a framework of rules and systems within which decision-making can be delegated with reasonably predictable results. The introduction of formalization, or the increase of it, may give rise to a curiously paradoxical effect; for whilst it involve greater delegation in decision-making, it is quite common for subordinate staff to resist it because it threatens established informal ways of doing things, even if the changes are a demonstrable attempt to improve co-ordination or the retrieval of information. Argyris (1964) and Hofstede (1967) noted that such resistance may take the form of rejection of controls ranging from the paying of lip-service to forms of active sabotage, like the supplying of false data or instituting delays. There are numerous examples in industry and public life of how procedures when followed to the letter can become self-defeating when "working to rule" is implemented.

Child (1977) also cites the choice which has to be made in methods of control between closeness of supervision or a light supervisory emphasis. Closeness of supervision is not seen as being related to centralization in the sense that decisions are only taken at the upper levels of the hierarchy. From the perspective of control it is perceived as more akin to formalization in that limits are set to the legitimate discretion of subordinates. It can be used as a substitute for formalization or as a complement to it in situations where it is felt necessary to check that employees are keeping to formally laid down rules or job specifications. At the heart of the supervisory emphasis is the managerial span of control and in a wider sense the proportion of managers and supervisors to employees in the overall organization. It does not always follow that a high supervisory emphasis results solely from the need to control; it may come about from the need to co-ordinate widely disparate types of activity. The balance of choice between a high and a low supervisory emphasis is characterized in some modern organizations as the difference between circumstances where the intrinsic nature of the work demands close supervision and those where it is possible to encourage a degree of "self-control", the latter being most evident in the case of individuals or groups who are highly trained and professional.

It is possible to draw fundamental distinctions at this stage between the two approaches to control which have been discussed. The main preoccupation of those who see control as an aspect of power is that order is threatened by members' lack of commitment to organizational goals and hence in need of re-inforcement either through some form of socialization into the dominant norms or values of the organization. This goal may be achieved by a set of "inducements" of various kinds or even, in the final analysis, by coercion. The problem, as perceived by those who emphasize power, is not one of coping with an

incomprehensible uncertainty but with a recalcitrant work force which is orientated towards a number of divergent goals. In contrast, those who see control as a structural/technical aspect of managerial responsibility are less likely to stress human factors and characterize organizations as relatively ordered systems surrounded by disorder and chaos, which is endemic but unknowable. The essence of this second view is that organizations are perceived as ordered systems surrounded by disorder which is irrational and all pervasive. Therefore, because chaos cannot be systematically explained and hence directly controlled, order can only be maintained by ensuring that the organization can adjust to changing circumstances. The problem of order becomes the problem of coping with external disorder by monitoring environmental changes and suitably modifying the internal order (Beer, 1966). Such a view characterized organizations as systems which are controlled through feedback mechanisms, using analogies from engineering and biology (Beer, 1966), (Katz and Kahn, 1966), and in general adopts what von Bertalanffy (1968) has termed the "mechanistic" view of systems and control.

The assumptions which lie behind this second view of control, which draw so heavily on parallels in the field of science, stand in need of examination insofar as they identify with scientific "laws". At the heart of the assumptions is the notion that control mechanisms are essential for continued survival because they modify organizations in the light of changing exigencies which would otherwise reduce them to chaos. Although the environmental disorder is unpredictable, the control system within any organization should be capable of "decoding" environmental signals in such a way that current demands can be met. At the same time the control system cannot formulate a coherent understanding of the processes leading to changing demands within the organization since the environment is in itself not a structured,

ordered, system. The weakness which is implicit in this position is the assumption that the randomly generated cues which threaten the internal order of the organization contain sufficient evidence for the control systems to adjust to immediate pressures and survive. This implies that it is possible to describe and understand these demands so that they can be adjusted to, but there is no indication how this description takes place; it is assumed to be obvious.

The idea that there is a natural tendency in all systems towards disorder led to a description of the total amount of control in an organization as an index of order known as "negative entropy" (Allport, 1955; Katz and Kahn, 1966; Wiener, 1950). Allport went as far as to state that "this tending toward entropy (maximum disorganization or disorder) is, so far as we know, a universal law of nature". According to Tannenbaum (1968) "... in social organizations, as in all systems that are to maintain their orderliness, there is a need for some means of negating the entropic tendency. Control is part of the means for meeting this essential requirement. For this reason organization is inconceivable without some system of control". The function of control in reducing the amount of entropy in organizations was seen by Allport as a comparison of the actions of persons who are behaving on the basis of their purely individualistic inclinations without regard for organizational requirements and persons who are behaving in organizational roles. The former tend, as a group, to show in their behaviour a considerable degree of randomness, coming and going at widely disparate hours according to their many diverse, personal, and idiosyncratic interests. It is this randomness which is the essence of entropy when viewed as collective behaviour. Negative entropy is therefore attainable through control as a move away from "laissez faire" to orderliness and conformity laid down as a rule within the organization.

Whitley (1974) challenged the approach of those who saw the process of control as linked to entropy on the basis that it was considered in purely formal metaphors drawn from misreadings of thermodynamics and a school of neurophysiology implicitly resting on common sense beliefs and rationalities. He questions whether authors who refer to "entropy law" and other "laws" are aware of the difficulties involved in statistical mechanics and associated concepts of order and disorder in physics (Georgescu-Roegen, 1971) and the ideological foundation of some current work in neurophysiology (Goldstein, 1974; Rose and Rose, 1974). A more profitable avenue of analogy is seen to lie in the discussion of control as an engineering problem, particularly in terms of the cybernetics systems approach. This approach interprets organizational control as a problem of engineering information theory, that of ensuring the adequacy of the control system through the "law of requisite variety" (Ashby, 1964; Beer, 1966). Organizations are reduced to telephone exchanges. Therefore, in treating control as a purely formal difficulty, this approach is able to ignore questions of conflict, power, and authority. The ways in which "information" is produced and evaluated are irrelevant for a view which defines it as a statistical residue of all pervasive "uncertainty". Similarly, problems of divergent or opposed "bits of information" do not arise since meaning is irrelevant to the formal capacity of a telephone line. It is assumed that "noise" is clearly identifiable and not subject to dispute. Since what is considered "information" depends on some purpose which defines it as relevant, this suggests that organizational goals are not the object of fundamental conflict. Beer (1972) goes out of his way in his emphasis on control in the face of uncertainty to preclude any possibility of dissent and dispute. From this perspective, internally generated

"disorder" would be totally irrational since the system is always in imminent danger of being swamped by external uncertainty.

In regarding control as an outcome of cybernetics, those writers who developed what is known as normative decision theory built upon the notion that this branch of management science is not value-laden. Stated in its simplest form, the task of the manager was to : (1) state goals; (2) identify and analyze alternatives; (3) select the most feasible alternative; and (4) implement, monitor and correct. There is an a priori assumption of rationality about the process, in which goals are given, all alternative courses of action are considered and an optional solution is computed using a simple preference function. Thompson (1967) characterized this process as a closed-system strategy: "...Having focussed on control of the organization as a target.... a closed system of logic (is employed, which) conceptually closes the organization to coincide with that type of logic, for this elimination of uncertainty is the way to achieve determinateness". Normative decision theorists are not normally concerned with the charge levelled at them that their formal concepts of rationality are almost universally inapplicable in the world of organizations. The whole point of normative theory is that practice should be altered to fit the theory.

Attempts to control are invariably affected by the ambiguity which characterizes management decisions, which do not lend themselves to the rigour and precision of rational calculus. When a manager states that something "might" work, he may even assign a number that indicates the probability of a particular outcome; but this does not change either its hypothetical character or the fact that the estimate is subjective. Management decisions are very often idiosyncratic, with constraints of time, internal political forces, external demands and organizational pressures which rarely permit the luxury of a long-range theoretical

study. For this reason, decision theory developed in directions with an alternative emphasis. Simon (1976) defined the change as choice behaviour based upon sets of factual and valuational premises. A valuational premise is a statement of preference, such as that a stated condition is or is not desired: a factual statement constitutes an empirical claim. With two such variables, Thompson and Tuden (1959) established a matrix with four decision situations, modified by Stout (1980):

		Valuational Premises	
		Agree	Disagree
Factual Premises	Certain	Programmed 1	Negotiated 3
	Uncertain	Pragmatic 2	Chaos 4

The matrix is designed to provide a number of bases for categorizing and analyzing the various circumstances in which decisions take place. Decisions may be studied on the basis of the premises on which they are established, the sources that generate and support them, and the extent to which they dominate an organization. Compared with normative decision theory, this descriptive approach permits the treatment of belief as a considerable factor in decision making and to embrace the concepts of legitimacy and consensus. The decision may thereby be viewed as a continual organizational process, not isolated in time or context, but an integrated part of individual and collective action. Hypotheses may be developed which take the form of testable propositions - not vague propositions of what should or should not be done, but descriptive statements that also anticipate current and future decisions in particular circumstances.

Cell 1 - the programmed decision - represents the most straightforward proposition and that which most closely approximates to

normative decision making. If there is agreement within the organization on values which translate into goals, and if there exist the means or the technology to realize the goals, then a set of rules can be developed which prescribe the course of action to be executed. This type of decision is most closely associated with the classic hierarchy of a bureaucracy, in which the decision-maker is the one who gives orders that subordinates carry out. The atmosphere surrounding this mode of decision-making may be described as autocratic. Subordinates must be controlled, and to ensure that they do not distort results the managers of an enterprise may have to support the decision with elaborate written instructions and regulations.

Cell 2 - the pragmatic decision - is evident where there is an agreement on goals, but a knowledge of the appropriate means is lacking, possibly through technical uncertainty. The problem, therefore, is strictly empirical, calling for a research orientation that is pragmatic and experimental. In this cell there is an absence of the dictation of method which is evident in cell 1, as this is made less evident by uncertainty over how to proceed. Meticulous planning is therefore unwise in these circumstances and may have to be replaced by a staged development of planning which adjusted according to feedback from the environment. Such pragmatic strategies of trial and error enable those who take decisions to take advantage of discovered opportunities as they occur.

Cell 3 - the negotiated decision - is politically uncertain to the extent that the facts of the case are largely agreed but there is disagreement over the preferred outcome or on the priorities to be assigned to particular outcomes. Pragmatic fact-finding serves little purpose in this context. The nature of the problem calls for strategies that permit the principal actors in the piece to settle their differences. Negotiation, bargaining or compromise may be required

to prevent a schism developing which will negate control and plunge an organization into chaos.

Cell 4 - chaos - represents the most intractable organizational condition: no agreement on goals and uncertainty about the means of achieving the goals. In these circumstances the problem may be ignored and a decision postponed indefinitely. This is most commonly seen in government, when legislation is "pigeonholed" or endlessly referred to committee because sufficient agreement has not been reached to form a basis for debate. Alternatively the situation of chaos can lead to the emergence of a "strong man" to deal with the situation or in extreme cases to the dissolution of the organization. When the situation in cell 4 is perpetuated, the most commonly-used device for reaching a decision is the formal hierarchical structure. In this case, it may be felt by organizational leaders as well as subordinates that any decision is better than prolonged deadlock or conflict.

The 2 x 2 decision matrix is not meant to suggest a static view of decision or of the control which they create. The decision process may involve constant movement from one situation or mode to another, depending on the problem, the people involved, and the anticipated consequences of a decision. According to Stout (1980) it is practically impossible to insulate an entire organization from this condition. Yet the formal hierarchy of most organizations is specifically designed to handle programmed (cell 1) conditions.

The importance of Decision Theory in its various manifestations is that it provides a framework in which control in management is given meaning and direction. The descriptive approach broke the mould of assumed rationality over decision making, which in turn was closely associated with the traditional idea that the manager's right to control and manner of doing so should be unquestioned. Such modification in assumptions about the factors which affect the nature of

control is also evident in the writings of those who sought to define the effect of environmental conditions on decisions in the organization.

One of the most elegant commentaries on the extension of Decision Theory as an aspect of control in organizations was developed by Simon (1960). The essential control required by management was perceived as being synonymous with the decision-making process. He describes three stages in the overall process of making a decision in the organization.

1. Finding occasions which called for a decision - the intelligence activity (which he used in the military sense of the word).
2. Inventing, developing and analysing possible courses of action - the design activity.
3. Selecting a particular course of action from those available - the choice activity.

Generally speaking, Simon acknowledged that the intelligence activity preceded design, and design activity preceded choice; but the sequence of stages could be much more complex than this. Each stage in itself can be a complex decision-making process, possibly requiring inputs from an earlier stage. However, he challenged the model that was the commonly-held one of "economic man" dealing with the "real world" in all its complexity, insofar as he selects the rationally determined that course from among all those available to him in order to maximize his returns. The need for administrative theory, as Simon put it, is because there are practical limits to human rationality. There are large non-rational, emotional and even unconscious elements in man's thinking and behaviour. In place of "economic man" Simon proposes a model of "administrative man". While economic man maximizes, or selects the best course available to him, administrative man satisfies, he looks for a course of action that is satisfactory or "good enough".

He stated "Most human decision-making, whether individual or organizational, is concerned with the discovery and selection of satisfactory alternatives; only in exceptional cases is it concerned with the discovery and selection of optional alternatives."

Simon went on to draw the distinction between two polar types of decision-making: programmed and non-programmed decisions. These were not seen as mutually exclusive but rather making up two extremes of a continuum. Decisions are programmed to the extent that they are repetitive and routine or a definite procedure has been worked out to deal with them; hence they do not have to be considered afresh each time they occur. Decisions are unprogrammed to the extent that they are new and unstructured or where there is no cut-and-dried method for handling the problem; this may be because it has not occurred before, or because it is particularly difficult or important. Clearly the cost to an organization is likely to be very high in cases where it relies on non-programmed decisions in areas where special-purpose procedures and programmes can be developed. Traditionally the techniques of programmed decision-making are habit, including knowledge and skills, clerical routines, standard operating procedures, and the organization's structure and culture, i.e. its systems of common expectation's, channels of information, and established sub-goals. The traditional techniques for handling non-programmed decisions rely on the selection and training of executive personnel who possess judgement, intuition and creativity. However, Simon argued that in the last two decades a complete revolution in techniques of decision-making has got under way, comparable to the invention of powered machinery. This revolution is epitomised by the emergence of techniques such as mathematical analysis, operational research, electronic data processing and computer

simulation. Initially these were used first for completely programmed operations, such as calculations and accounting procedures, which were formerly regarded as the province of clerical workers. But more and more elements of judgement can now be incorporated into the programmed procedures. With advances in computer technology it is certain that more and more complex decisions will become programmed, so that even a totally unprogrammed decision, made once and for all, can be reached by means of computer techniques of building a model of the decision situation.

Simon's approach to decision-making as an aspect of control was organic in the sense that it emerged from the nature of the decision to be taken and conditioned the nature of the person or the mechanism for taking it. An important addition to the commentary on what conditions the mode of control also emerged at this time in the work of Woodward (1965). In her survey of 100 organizations in the South-East Essex area she drew the important conclusions from the manufacturing concerns studied that control within the organization seemed to be influenced by the nature of the technology used in the industry. With relatively small degrees of overlap, the organizations in question were grouped in ascending order of the technology involved:

- a) Small batch or unit production of orders
- b) Large batch or mass production of orders
- c) Process production, involving continuous flow gases, liquids or solid shapes.

From the large amount of information gathered there emerged several pointers to a direct and progressive relationship with advancing technical complexity, but notably:

- labour costs decreased as technology advanced.

- the ratios of indirect labour and of administrative and clerical staff to hourly paid workers increased with technical advance.
- the proportion of graduates among supervisory staff engaged on production increased as technology advanced.
- the span of control of the chief executive widened considerably with technical advance.

There were a number of interesting comparisons drawn between groups in small batch and process production at the extremes of the technical scale, but both differed from groups in the mass production area in the middle. Organization was more flexible at both ends of the scale, with duties and responsibilities being less clearly defined. The amount of written, as opposed to verbal, communication increased up to the stage of assembly-line production. In process-production firms, however, most of the communications were again verbal. Degrees of specialization between the functions of management were found more frequently in large-batch and mass production than in unit or process production. In most unit-production there were few specialists; managers responsible for production were expected to have technical skills, although these were more often based on length of experience and on "know how" than on scientific knowledge. However, when unit production was based on mass-produced components more specialists were used. Large-batch and mass-production firms generally conformed to the traditional line-and-staff pattern of organization, with managerial and supervisory groups breaking down into sub-groups with separate, and sometimes conflicting, ideas and objectives. In process-production firms the line-and-staff pattern broke down in practice though it sometimes existed on paper. The function of production

control became increasingly important as technology advanced. However it was the "administration of production", as expressed by Taylor (1911), that was most widely separated from the actual supervision of production operations in large-batch and mass-production firms, where the newer techniques of production planning and control, methods engineering and work study were most developed.

The significance of Woodward's work in relation to the function of control in the organization may be seen in terms of both cause and effect. By throwing light on the conditioning effect of technology on the way things are organized in a concern she was defining that certain modes of control were appropriate or necessary. Certain features of the organization, such as the number of supervisors and the span of control, were defined as an effect of the technology and so their pattern emerged to meet these conditions. Of particular importance was the idea that proposed technical change created new "situational demands", where the means of control could be foreseen by the systematic analysis of the new technology. Failure to adapt the organizational pattern to new technology could then make the technology itself less effective than it otherwise would be.

Our consideration of the phenomenon of control in the organization began with the perspective that it is synonymous, or at least closely associated, with power in its different manifestations. Although it may be argued that such power has a political and social basis, some writers have stressed the impersonal, a-political nature of control within the organization as one of the structural/technical tasks facing the management of the enterprise. More recently Salaman (1981) and Clegg (1979) have reminded us that we cannot ignore the

nature of the forces which establish controls in an organization, since they invariably reflect the social, economic and political realities which gave birth to them. According to Salaman, "... the fact of organizational membership exposes members to the dual nature of their membership; that is both an economic and a political relationship".

Clegg conceived organization structure in terms of a number of "selectivity rules" which were the source drawn upon in the use of power in order to control members of the organization. These rules, which may in one sense be seen to have developed historically, also touch upon the basic social and political beliefs of the commentator: they are conceived of as a "mode of rationality" behind the nature of control which is exercised.

Table 1 The main types of sedimented selection rules.

<u>Types</u>	<u>Examples</u>
Technical rules	Taylorism, as it defines all that is technically necessary to know at a specific work-place in order to carry out the relevant tasks, particularly in relation to wage systems.
Social-regulative rules	Mayo, and post Mayo, interventions to repair social solidarity in the organization.
Extra-organizational rules	Effects of other discriminatory, e.g. discriminatory practices of racism, sexism.

Strategic rules Monopoly capitalism: e.g. buying out of raw material suppliers, dealers, outlets, etc.: links to finance capital, mass advertising, securing of favourable state, interventions for social consensus or organizational activities, e.g. social contracts and wages and incomes policies, socialized infrastructure costs.

The common thread which runs through the rules elaborated in this way is that power in organizations derives from control of the means and methods of production and therefore the purpose of the rules is to maintain control of the labour process. Prior to the era ushered in by the technical rules, which were the embodiment of scientific management so closely associated with F.W. Taylor, control was exercised over labour in various societies by a mechanism which may be expressed in economic terms: the existence of a large pool of unemployed, the constant insecurity of employment and the misery of poverty on the negative side, and on the positive side, the existence of "piece work". The cash-nexus was, therefore, the accepted form of control of labour in emergent industrialized societies in the second half of the 19th century and early part of the 20th century.

Taylor was the founder of "scientific management", the time and motion study of operations which derived its claim to science from "accurate and scientific study of unit times" (Taylor, 1903). By taking given manual operations and analysing them into their component, smallest and simplest, elements of motion, the technique of scientific management aimed "to increase productivity by improving the performance of workers" (Anastasi, 1964). Its scientific standards of

measurement of human labour time derived from the mechanical and technological aspects of the operations being analyzed and its operative principle is to measure the unity of labour and machinery in their productive application. In effect, this is not the unity of equals, for human power becomes subordinated to mechanical power. The effect of this process was described by Palloix (1976) as "..... a massive "de-skilling" of production workers, together with a loss of autonomy in the reproduction of labour power, and to the "over-skilling" of a small number of workers responsible for innovation, organization, regulation and repair". Control of their labour power was thus taken out of the hands of workers, in terms of their discretionary knowledge, in order to centralize control within the organization in a few men. Taylorism, in modified forms, became the orthodox doctrine of technical control in contemporary "industrial capitalism" (Karpik, 1977), based on the policy of high wages for high output. Although this form of control may appear to be purely technical in nature, it is not difficult to see why some writers have chosen to interpret the motives and effect of the control in social and even political terms.

Taylor was, in effect, an historical agent for the application of scientific methods in the Industrial Revolution in the latter part of the 19th century and early 20th century based on a relatively simple application of craft-skills and ingenuity in a task-continuous setting. As industries developed with new scientific skills being applied, mass production emerged in the 20th century as the prominent evidence of the application of technical rules. Durkheim (1964) characterized the meaninglessness of modern, fragmented, mechanized work as giving rise to various forms of the "anomic" division of

labour. This too was to become a comment on control of a social and political nature in that it stressed the importance of the moral regulation of the world of industry in circumstances where specialization and the differentiation of work are pushed too far. Durkheim's view of control in organizations must be seen in the broader context of his treatment of anomie, or alienation, in his other works, notably "Suicide" (1952), "Socialism and Saint-Simon (1959), "Professional Ethics and Civic Morals" (1957), to devise solutions to the widespread problems of anomie in modern society. He advanced the view that the moral character of society and social life can only be rediscovered through the re-emergence of the power, the moral pressure, of collective forces which will attract the commitment of citizens and workers to their collective (but differentiated) existence. The argument over the role of various forms of membership to re-establish this commitment became highly relevant in the emergence the countervailing influence to Taylorism in the form of the Human Relations Movement, characterized by Clegg as Social-regulative Rules.

The work associated with Elton Mayo from 1928 onwards in terms of a number of experiments at the Hawthorne works of the General Electric Company centred on the variables which were seen to affect worker performance. In popular terms these experiments were seen to be important in drawing attention to the "human factor" at work and to forces at work in human groups. However, it was Mayo's subsequent wartime studies into absenteeism and labour turnover which emerged in his work "The Social Problems of an Industrial Civilisation" (1975) that led to the development of the "Human Relations School". The persistent message which emerged from Mayo's work in this area

was that the real cause of the problem was the lack of "well-knit human groups". It is possible to view the contribution that Mayo made from different standpoints: it was the discovery of a new factor in human relationships within the working organization. Others, notably Mandel (1975) saw the work as a logical corrective to the forces of Taylorism which had flourished in circumstances of gross unemployment and which were no longer appropriate in the situation of full employment of the Second World War. Coercive domination was no longer possible without a reserve army of the unemployed. Mayo had counterposed "The rabble hypothesis" of economics and administration to the "doctrine of human co-operation" which he argued had been the civilising principle of the Christian Church. His contribution was therefore perceived to be an attempt to restore the hegemonic domination of capitalist employers through the control of working groups (Clegg, 1979) without necessarily resorting to the coercive aspect of unemployment.

The form of control exercised within organizations under the banner of the Human Relations Movement emerged in different forms - job-enrichment, co-determination of work, joint consultation, worker participation. Such innovations do not challenge the division of labour which is implicit in Taylor's work into a hierarchy of mental and manual skills. Rather may they be seen as neo-Taylorist than anti-Taylorist insofar as they conform strictly to Mayo's (1975) intention not to negate Taylor's division of labour in attempting to preserve it through new forms of "persuasion" in changed conditions of control.

Friedman (1977) and Clegg (1979) suggest that the two

strategies of control which are termed technical and social-regulative rules may be applied to the labour process not only in different times in the history of the world economy but also selectively to different elements in the labour process. It is recognized that Taylor's rules of control cannot be applied universally, since not every worker can be de-skilled nor could everyone be a high-wage labourer. Technical rules will tend to apply to those workers who are more peripheral to the labour process (less strategically contingent, according to Hickson et al., 1971), while social-regulative rules will tend to be applied to those workers who are more central (more strategically contingent) to the labour process. The third strategy of control proposed by Clegg (1979) is the further division of the work force through "extra-organizational rules". The unstrategic skills in an organization possess a low social definition in the labour market, and hence will tend to attract the most socially disadvantaged groups in the labour market, those groups which are sexually and racially discriminated against: women and ethnic minorities such as blacks or recent migrants. Managements are seen often actively to encourage these divisions by overqualifying not only managerial skills, but also other strategically contingent skills, or by locating administration and research tasks only where white male native-born workers can easily get to them (Friedman, 1977 Berger, 1975). The social and political implications of these rules in relation to management and certain governments are unambiguous.

Whilst social-regulative and technical rules as means of control concentrate on the production of commodities, a logical extension by way of intervention is evident in the circulation of products which

is characterized by Clegg (1979) as the strategic rules. The production of commodities by monopoly capitalists and also, to a degree, by governments and states, is accompanied by a range of activities both prior to and after production which are invariably as powerful a means of control as the nature of production itself. Such interventions begin with the establishment of finance capital and extend to the licensing of material suppliers, dealers, outlets; mass advertising and securing the necessary social consensus or state intervention to support the organizational activity, which may include wages and incomes policies. Vernon (1973) estimated that there were some 187 American, European and Japanese international firms, primarily monopoly capitalist organizations, which were pursuing policies of strategic control. The situation, as elaborated by Mandel (1975) and Sohn-Rethel (1976), is characterized as one in which capitalism develops extensive control over selectively relevant features of the market, as constructed by managerial market analysis, simulation models and other modes of enquiry. In doing so, organizations will attempt to develop strategies which "co-opt" the state to their interests in their attempts to control those contingencies which are key to their profit-centred activity, in order to both protect and increase their advantages.

The discussion on the strategic rules illustrate how difficult it is to separate forms of control from power itself and from the broader social and political considerations in which they are set. Even the analysis of control as one of the structural or technical tasks confronting the management of an organization is never far removed from thoughts about the prerogative of management to act in

certain ways. Control is therefore a multi-facet system, one of a number contributing to the pattern of management, which is seemingly necessary if an organization is to achieve performance. The absence of it may not be wholly disastrous insofar as individuals and groups may be capable of acting spontaneously and constructively in the furtherance of organizational goals. On the other hand the all-prevailing presence of control in many different forms of organization does much to emphasize its necessity notwithstanding its technical form, social context or the political motivation which promotes it.

THE MANAGERIAL PERSPECTIVE ON ORGANIZATIONAL CONTROL

Whether as a technical device or as part of a broader political securing arm, control is clearly one of the most visible aspects of managerial interaction with all the people in an organization. To the extent that employees - as well as managers themselves - voluntarily enter into a work agreement in Oriental Gas Products, as they do with almost all other working organizations, we may say that the right to control is accepted by everybody in the first instance. Very few employees are likely to demand a detailed explanation of the different ways that control, inevitably initiated by management, is implemented since it is deeply implicit in the act of joining that organization. If at some later stage the nature of control is challenged, it is likely to be because the individual feels that an excessive burden is being placed on him or her, that freedom to act is unreasonably curtailed, that the control is not the most effective for the work process itself, or in exceptional cases that the management is acting in a manner which contravenes a particular legal or moral code. Such departures from the acceptance of control, as defined by Weber (1961), were relatively rare in Oriental Gas Products. More commonly, employees had recourse to the little-used processes of industrial relations in this organization, whilst the managers could indulge in their own version of this action through securing influence through their peers or other forms of political in-fighting.

The importance of the control function was readily agreed upon by all of the seven principal managers of this organization. It has also been argued that control is the natural corollary of the phenomenon of power, and therefore the managers were asked to put themselves at centre stage in the discussion on what control meant through their

eyes and in the position which they occupied. The position of the manager is indicated and the most concise indication of the question or point given in the discussion leading up to the response.

Managing Director .

[What different forms of control do you see as operating in Oriental Gas Products and how deliberately are they instituted?]

"Well, let us take it in terms of some of the areas you touched on: take technical control first. Over a considerable period of years we have built up a body of procedures that has either come through our parent company or acquired through experience. These are embodied in a set of rules which are applied and reported against, and they represent an area of control down to the very fine detail in terms of the technical running of the plant. In terms of control from a more commercial point of view, it is really exercised like a pyramid if you like, starting with the annual budget exercise which asks each department to implement its findings in typical detail for the year and then takes it beyond that to an action plan. So first of all they have to state the anticipated result month by month given a certain level of production volume and certain assumptions about the economic climate. They then have to state what particular action they want to take and these steps are then monitored through the year on a monthly basis by them having to report back against the overall plan. I think if one looks beyond that at more general administrative systems, these again have been built up over a long period and are modified if they appear to be weak through the circumstances which have occurred. So we have a set of standing instructions which supply guide lines to almost every department on the procedures to be followed in certain cir-

cumstances. There are obviously occasions when we find some of our controls are too weak. Whenever this happens we will strengthen or modify the instruction in that area as a result of discussions at the executive level".

[How would you characterize "control" relations with your senior management?]

"It is really about fine tuning. It is a situation in which we as an executive group look at our results, the overall results of the company, and so all of our executive group are aware of those areas that are going according to plan or deviating from it. This puts the spotlight on those areas that require fine tuning".

[Ownership is partly British, partly French. Does this lead to unified forms of control?]

"Yes, the two sides establish a fairly broad agreement and through board discussion twice a year we would agree on the general direction that we want to take the company in broad policy, such as in our attitude toward China and the possibilities of a joint venture. Beyond that our French partners exercise virtually no day-to-day or month-to-month control over the operation. We do have to submit annual budgets to both Paris and London, but because we don't require any cash - or at least have not required any cash for the last ten years - it has not required any response from them. They haven't at any stage ever come back and questioned us, so its been very much about keeping them informed on what we are doing".

[A regional manager from the Australian associate company visits you, so presumably there is a form of control from that angle.]

"The British representative, who is Chairman of our board, is also

Chairman of the board of the Australian company. He also carries regional responsibilities and is therefore on the board of our associate companies in New Zealand, Malaysia and Singapore as well as ourselves. The French run it differently in the sense that they control this region through a separate company which has its own management structure and in which they have their own equity".

[How would you characterize internal control of the production system?]

"In the main the controls are largely installed. Where we need to review them it is often as a result of change, the introduction of new products or of the technology which cause modifications. Often we are aided by the fact that the changes are worldwide and therefore receiving the attention of our parent company, which obviously has greater resources than we have to devote the effort to establishing what changes have to occur".

[I understand that the company is installing a computer system.]

"Yes it is. We were previously running on a bureau system, sending all of our information out for processing. Because of the lack of control that we had over that, and the age of the system, we felt the need to bring it up to date. Interestingly enough, we brought in the change in association with our sister company in Malaysia, so we installed compatible computer systems at the same time. Its main advantage is going to be that we will be able to handle growth over the next few years without any additional people, so we will gain in white collar productivity. I think we will also gain in a qualitative sense in that we will be able to make more information available to management so that we can see the whole picture available more quickly and effectively than in the past".

[Do you have a particular area of technical control difficulty?]

"I suppose the major area of control is in that of gas cylinders because we have some 50 million dollars of assets invested in this area, with up to 90% outside in customers' hands and therefore out of our immediate control. In fact we have individuals employed full time checking customers' cylinder holdings against records. It is a full time job where you have to employ very strict control."

[Does this control of externals have to be applied to customer accounts?]

"I don't think more than any other business would have, but it does tend to be complicated by the nature of the business. We not only have to maintain the records of a deal resulting from the sale of product to the customer, but this is complicated by units in which we sell products which vary considerably, so we have to record and monitor everything with a separate computer system."

[What about the human area of control, particularly industrial relations?]

"I think we are fairly typical in this area from an industrial relations point of view. It is an area that concerns us in the sense that we foresee the situation changing and we are rather concerned that the lines of communication are weak between the workforce and management. If there is any dissatisfaction for any reason amongst the workforce, it requires a normal organization structure to speed it up, and there is an unwillingness for workers to talk about some issues with their supervisors. What we are trying to do is to establish informal leaders in certain groups, particularly the more militant ones such as the drivers, and to work through these informal leaders to build up a me-

thod of communication that we hope will avoid confrontation later on. It is certainly an area where it is difficult to know when you are not getting feedback, but we believe that we are suffering."

[What is the biggest problem of control?]

"I think in an organization of this size it is a lot easier to exercise control than in a very much larger divisionalized organization and so running it functionally does help. I think though that this leads to problems where control spans more than one department. By having a functional organization you have all the gains of simplicity and clearer areas of control. But you have to live with the problems of the inter-departmental nature and it is this area that takes up a lot of time ensuring that the right decisions apply laterally and that problems don't get bogged down because they require the attention of more than one department."

[This is the co-ordinative element in control.]

"Yes, but whichever way you cut the cake, you have one or another problem of that sort."

Finance Manager

[What does the term control mean to you as the financial specialist?]

"Perhaps I may describe control in terms of the people working under me. I have three sections working under me: the accounts section, the data processing section and the store and purchasing section. The control would vary very much according to the section. In the accounts there are three sub-sections - accountancy is concerned with exercising budgeting control, preparing accounts, comparing with budgets and explaining any variances. This sub-section writes explanatory notes and I go through them all to see if there is anything exceptional that re-

quires further explanation. The departmental manager prepares the budget for the forthcoming year, discusses it with me and the managing director, and so the framework is set. Adjustments can be made late if, say, an overhead is too high and the profit can sustain it: if not, we have to cut it.

Another sub-section is credit control. As you know, there is no point in making a sale if there is no one to collect the debt. The lower the outstanding debt the better, but then if we exercise too tight a control we will upset the customer. A few years ago, before I joined the company it was O.K. because there was no competition and we could exercise a powerful form of control. We could set a date, and if a debtor did not pay we would stop supply. Now the approach has to be more tactical. We have to have a close control on debt together with what steps we plan to take when the customer refuses to make a payment. This is handled on an escalation basis: if after two months the debt cannot be paid it is referred to the chief accountant; for a longer period it is referred to me and ultimately to the managing director.

Another area is the town section which specializes in cylinder security or cylinder control. Nearly a quarter of our assets are tied up in cylinders - quite a substantial amount - so we have two people who go out to the customers to check their cylinder holdings. Although it is a physical function, it comes under accounts and not distribution. It is necessary to have someone outside production, distribution or marketing to give independence as an aspect of internal control."

[Is this your total area of control?]

"Last year we installed our own computer, so there is the data proces-

sing section which has superseded the bureau service that we used.

After we had our own computer control became more important because our people had direct access to the computer. Since we are going to the on-line stage, the security of computer information is also becoming important. We have formed an information security committee that consists of finance people and the representatives of various departments. All of this gives rise to additional control in matters such as passwords, machine control or the information itself and it is taking up a considerable amount of my time designing the systems."

[Are you involved with other units?]

"Yes, I have another unit for stores and purchasing. In the case of stores it is mainly fiscal quantity control of the stock in hand, which is quite a substantial amount. Apart from gases, we sell a lot of equipment and it is this that represents some 80% of our stock, the balance being on plant space. The object of control is to keep the optimum quantity of stock - simple in principle but difficult to manage in practice. If you have insufficient stock you may lose the sales or you may have to close plant because of insufficient plant space. If you keep stock levels too high this ties up capital. This is why we set up internal controls with certain purchase levels approved on my signature and certain ones on that of the managing director. We endeavour to make as many controls as we can automatic, by setting criteria such as standing instructions and purchasing orders up to a certain amount, supplemented by internal memos and instructions."

[What happens if people don't agree with a form of control? Is there any discussion?]

"The control level is not basically set by finance people, but out of discussion with the executive committee every month. If we want anything new or want to change anything we bring it up at that meeting. We will discuss it and get the agreement of the departmental head. That is the way we get approval: it is mainly out of consultation."

[What is the main time cycle of control - monthly, weekly, daily?]

"It depends on the type. Of the various types, budgetary control is mainly monthly. Credit control is not monthly, but you have to keep a close watch on it because if settlement is late you have to call the customer earlier rather than later. That is why we have some sort of feedback to the chief accountant or to me to see what sort of action has to be taken in settlements in the next week or two."

General Marketing Manager

"In terms of the marketing manager's role, control is to ensure that your marketing mix is right for the market, which means to analyze and to monitor the progress of your product, to see whether too much or too little effort is being put in, and to implement plans to achieve objectives. Control comes in two parts. Firstly there are reports; to get certain reports that monitor the sales volume, the market growth, your prices, and your trends in profitability. Secondly, there is control through people and, in my experience, that comes through the control of the implementation of action plans and objectives. I am also in charge of distribution which also has a control aspect."

[Do the controls reflect the need for a high degree of planning?]

"I think working in this place puts special strains on the planning cycle: industry here changes very rapidly and therefore it is diffi-

cult for planning to be on a high plane and long term. Our market segments go up and down within a two to three year cycle in any particular segment, so we tend to plan, I think, in rather short terms compared with most other western companies. Compared to others in this territory we are average in our planning."

[Are there any areas of the marketing function which require a special form of control?]

"Going back to the highly flexible nature of the economy here, this conditions the control we exercise and the needs and time of implementation are normally much shorter than those of our counterparts in other parts of the world. We have to react in this way. The gas industry traditionally is not a fast reacting industry compared to consumer products. However I think that one company's speed of reaction is generally faster here as compared to our counterparts in other parts of the world."

[Are many controls established on a routine, automatic basis?]

"I think we have a fairly established control policy on a routine, day-to-day basis. The lower level of control is done automatically either through computerization or through standing instructions or through procedures. The control that we exercise is really that of higher management decisions and for the most part that is done through management objectives."

[Do you see negative as well as positive aspects of control?]

"It's a matter of distinguishing. At one extreme we receive government control up to a fairly senior level: there are very stringent rules that our company has to follow. This applies to the lower levels in

a company of our size with regulations on how to issue the invoice, the advice note, how to debit, credit, and how to price, all of which is very stringent. On other parts of control we are more positive, but a lot depends on the person concerned. Marketing is traditionally more innovative or relaxed about control than is the case with engineering because of the public safety aspect in the industry. Whilst the operations manager may review every month the detail of engineering design, in marketing we don't have to do that and we encourage more creativity and innovation; and that in turn depends upon the nature of the person concerned. You have to let them spend freely and come up with opportunities."

[Are you saying that the nature of control in the commercial area is different from that in finance?]

"Yes, entirely different."

[Are the people below the second line of management given discretion to modify controls or are they more or less given a package and told to get on with it?]

"I think that under the managing director in this company the departmental executives have a lot of freedom in what to do. They have a strong say even in designing the low level control system such as they are responsible for in their own department. They can ask for what kind of report they want: they can change these reports if they so want. With regard to working with various subordinates, they certainly have a large degree of freedom in how they want to run the department. There are in effect four or five levels of managers: the managing director, the departmental executives, the divisional managers,

then the control, then the supervisor. The big divide is between the departmental and divisional managers, the former having a much larger degree of freedom than the latter."

Operations Manager

"Basically my sphere of control within the company is to make sure that we have sufficient products to sell and to control the cost of producing those products, so that the main impact within the company as a whole is making sure that we can meet the demand for those products and that we can meet it at a cost that is acceptable."

[Does the finance manager have a role to play in establishing cost criteria or are you the one to carry the buck at the end of the day on the standard set?]

"No, he has a certain role in that his purchasing department contributes to the control of raw materials being bought, but their role is really to feed the information in relation to the cost of material to me. They will say you can have product A at cost X or product B at cost Y; which do you want?"

[Are you aware of cost criteria for products in other similar plants?]

"Yes, I get the information. The significance of cost of product is important everywhere; but making comparisons between one place and another is not always very valid if you are comparing money. If you compare by other parameters, it is difficult to do precisely because you have to be sure that you are comparing similar influences. I wouldn't say that comparison with other companies is given a great deal of credence. Certainly, norms exist which are at the back of your mind all the time. If they were significantly different from the norms

which we know, we would query why, but really comparing performance over past years here with predicted performances that we wanted to achieve or we anticipated."

[Apart from cost control there is physical control, which is done through subordinate supervisory staff. How many are there?]

"Below me there are three levels of supervisory staff; but you could say four. If we take the maintenance department, we have a chief engineer, who has a maintenance engineer, then a supervisory level, followed by a chargehand. But in quality control we just have two levels. The spans of control vary depending on the function. It can be one on one, as in quality control; but in production with a shift it can be up to 25."

[Could it be said that a lot of your control instructions are written down or do rely on human discretion?]

"No, a lot is written down in terms of specifications, criteria or limits that they can refer to for guidance. Really, the whole thing is set up at that level, so there are not many critical decisions that have to be made. In other words, routine is established and the deviations from that routine are not enormous. For example, the production manager will decide when certain plants will be stopped and started; he does not have to go down to the people who are on night shift. They will have been told that this plant will be shut down at a certain time or when you achieve this level of stock. They will only have to make decisions in the event of unforeseen happenings."

[Is the factor of safety taken care of by routine forms of control or by making special efforts to ensure disasters don't occur?]

"It has to be both. Yes, safety is a very important factor. It has to be inherent in every aspect in what we do, and it has to start being considered at the time of design. Equipment that is put in initially - installed or manufactured - has to be totally designed bearing in mind safety regulations that are internationally designed and internationally understood. This idea really has to exist at every level down to very basic rules and regulations governing the behaviour of every individual, such as you must not smoke, you must wear safety shoes you must do this, you must do that, which is very clear cut. This applies up to engineers who are making decisions about the choice of materials and things like that. It is something which is very, very specific to our industry. The safety requirements could not be adopted from other industries in general. Of course, there are always ones you can use, like don't run when the roads are wet, and things like that, but the majority of our safety appliances are very specific to the industry."

[How do you see your personal role in effecting control?]

"I go into the plant on a daily basis, but I suppose that is to keep myself informed, to be able to notice things, to pick up things which might not be reported through official means. Control is really fed back through a series of reports, some daily, some weekly, some monthly, and I suppose my involvement in these is dependent on results. If everything is going according to plan and the figures I am getting back in a particular area are what I am expecting to see and what I want to see, then I would probably leave that area alone. In other areas, if the figures coming back are different, I would probably get

on to my next level of management down - perhaps even one below that - to delve more deeply into why we are not achieving what we were expecting to achieve."

[As a process operation, you appear to work on returns of information rather than by ad hoc personal intervention.]

"No, no, not necessarily. We can change the method by which we do something quite significantly. A typical example is when we find that a particular area is causing problems, or we could save a lot of money by changing it. This may well involve an investment in new equipment, different equipment, which we will then undertake, and that will significantly change the way which the procedures are carried out. That will happen fairly often."

Distribution Manager

"In the area of my job, physical distribution, there are several things that I need to control. First of all there is the efficiency of transport, the delivery efficiency. We have a lot of tests to measure each activity, such as the number of cylinders carried per track per day, the number of cylinders carried per mile and, in the case of liquid transport, the number of cubic metres per tanker carried and percentage capacity and so on. These are some of the control parameters which we monitor quite closely to see if we are doing alright or not. This is a control over efficiency, which we assess at the end of each month. Then there is cost control, which is obviously very important. This can be done daily, more or less on an ad hoc basis, when we sign overtime authorisations or maybe when we sign expense vouchers. Of course, we don't know the full picture until the end of the month.

Then safety is a major concern in our industry, so we rely very much on the work of our supervisors to keep a close watch on various people every day."

[In terms of control procedures are there any conflicts of interest between distribution and the sales function?]

"Yes, there are quite often clashes in the area of control. A common conflict between sales and distribution comes in the service to the customer. As the distribution manager, I want to maximise our efficiency in the number of cubic meters or the number of cylinders delivered per truck, per unit resources, in order to maximise our output. On the sales side, they want to follow what the customer says. If the customer wants us to deliver so many cylinders it may clash with our objectives; we may want to maximise and it may not match the customer's requirements."

[Can your controls be made to be applied automatically or do they have to be tailor-made?]

"I think that we have very limited "automatic" control in the sense in which I think you mean it. We have been in operation for such a long time, our drivers and workers have in many cases been with us for a very long time, so informally we have set up some sort of performance or standard. Usually the workers know what is expected of them and the supervisors know what to look for in the performance or standard; so in a way it is informal and quite accepted already. In that sense it is not an "automatic" control."

[If not a family atmosphere, I have the impression of a sort of understanding between you and the distribution workers.]

"Yes, it is quite definitely the case in distribution in this organization. I have seen the same function being performed in other concerns, but the difference in our company is that, in distribution in

particular, our workers have been with us for a long time and hence we have very few inexperienced employees. It is also the case that, apart from work in the company, many employees maintain a good relationship socially when they are not working. Such is the climate here that the supervisor exercises a paternalistic approach rather than one of authority. The company has been changing to the approach of authority, but the human approach still plays an important part in distribution."

[How many workers and supervisors do you have under you?]

"There are about 100 people in distribution, which is just about a third of the company's workforce. In terms of supervision, I have one transport controller working directly under me: he in turn controls a few supervisors with the drivers and other workers under them. Transport and distribution is a pretty labour intensive business, so you see we rely very much on people. On the other hand, it is universally acknowledged that transport workers are the most difficult people to manage, because you cannot see them for much of the time they are working outside. A lot depends on an understanding of the rules between two parties who have been working that way. If you set a high standard it is difficult to enforce it."

[Do you see controls operating in a negative way?]

"You mean how well is control accepted by the people? I think at the moment controls are quite well accepted in the sense that we haven't had a lot of change or any traumatic changes recently, but there is always a problem in this company with resistance to change whenever we impose a new control procedure and it will take people a long time to

accustom themselves to the procedure."

[Do you ever go out and visit customers?]

"Occasionally I visit customers when a particular problem needs to be sorted out by higher authority, from a management point of view."

[How would you characterise your customers?]

"You could say that almost all industrial establishments are in a way our customers. We have some 6,000 customers on our books, but of them only 2,000 could be described as active rather than occasional in their use of our products. Medical customers are usually big users, unlike the industrial, which contain only a few large units and many small ones. Overall in distribution we are well established, our activities do not change much over time. We distribute cylinders nearly always to the same people, in the same week, never very dramatic changes, so the performance standards and targets don't change very much. The control system is established and our people can usually follow it without any problem."

Sales Manager

"Since I am Frenchman working in a predominantly Chinese environment, I delegate a great deal through three subordinates who come directly under me. They in turn have a number of sales managers - three in the gases division, five for industrial equipment (mainly welding products) and two on the medical side for gases and equipment. There are some 50 sales representatives, clerks, development and product engineers in the area."

[How do you exercise control in the sales function?]

"Mainly through our sales objectives. Product representatives have target for the year mainly in terms of sales volume. They also have

"call ratios", relating to the sales value (rather than number of items) per call or succession of calls made. Weekly reports are called for. You must appreciate that our gas business is very different from the equipment sales. In gases the important thing is the customer relationship. With equipment, it is brought in globally and must be sold individually: it is more labour intensive. Both have implications for the kind of control we can exercise, but in a different way."

Personnel Manager

"As far as I can see, because of our company's size we are quite centralised. Most of the policy-level matters will go to the executive meeting. I am one of them. We have six people in the executive meeting and my major area of responsibility is that of personnel policy. I also look after the salary levels of the company, salary gradings, recruitment, industrial relations, staff benefits, and training."

[How would you define the nature of control exercised in the company?]

"Our approach cannot be classified as either autocratic or democratic: it is a sort of systems approach. Everyone has his area of responsibility. Take the question of salaries. The salary level is decided by the executive meeting to determine the percentage: each department will take this as a guideline to do its own part of the job and to compile it to feed back into the policy and the target. Then take training. It is personnel's job to develop training policy. We then distribute material to various departments and the head will recommend the staff to participate in a particular programme. It all has to be approved in several steps and then we co-ordinate these pro-

grammes. The authority and the control is distributed to various responsible people instead of to one person. My job is as adviser, coordinator and provider of services to the department concerned."

[How do you cope with a dispute between your department and a line manager when it comes to controlling things?]

"In fact there are very few cases of that happening. When it does, we try to compromise and sort it out on our own level. In the event that it cannot be sorted out with the department head, we refer to the managing director. We have very few problems on the industrial relations front. But if there are, again we work primarily through the departmental head, but all the time the managing director is aware of what is happening."

The terrain of the cognitive maps

The encounters with the seven principal actors in this organization, taking the phenomenon of control as the principal focus of the agenda, could not be described as a direct sampling of the activity. Indeed, a number of authors who are commonly regarded as having sampled directly (Pugh and Hickson, 1976; Pugh and Hinings, 1976, inter alia.) have done so by questionnaire and interview means and have, in a sense, followed the spirit of our enquiry by tapping the perspectives of the actors, although their approach led to extensive forms of classification. Two perspectives emerged from the more open-ended encounters pursued with Oriental Gas Products: the description of the actual means of control through systems and people, and the individual stance taken and emphasis placed by the individuals concerned, which added richness and meaning to what might otherwise have been a catalogue of facts.

In our earlier critique on theoretical approaches to control, three broad perspectives were identified:

- control is a phenomenon which is synonymous with power.
- control is a structural/technical task confronting management.
- control is a social and political force which has implications outside the organization in society at large.

Most of the views expressed fell into the first two of these categories, reflecting the distinctively Weberian idea that control is the natural outcrop of power, which is legitimised in the position of the manager. It follows from this that control represents one of the primary structural and technical tasks which confronts the manager. These emphases came through consistently in the exchanges with the actors, not necessarily in their attempts to conceptualise in a theoretical sense, but as a distillation of their experience. The notion that control is an effect of broader social and political forces did not generally emerge from the ideas put forward, possibly influenced by the circumstances in which the discussions were held. The exchanges took place at the managers' place of work and the overall impression given to the writer is that the managers were more comfortable to discuss control in the immediate context of their jobs than in bringing in the broader and infinitely more complex arguments which would tap their views on the role of the organization in society and elicit broader social and political viewpoints. It is possible that the time element was something which conditioned this reticence to embrace a broader societal element in the discussion. Perhaps also, the reluctance to broaden the agenda into something outside the relatively safe con-

fines of the work context and that of the organization was something that the actors desired since they were dealing with someone from outside their organization, whose general position and views were unknown to them, and hence the attraction of broadening the discussion was not sufficiently present. Herein lies the main difference between the focussed situation of the questionnaire with interview and the more interpretive, free-flow exchange on a more lightly-formulated agenda.

We may take the argument further by suggesting that the structured information-based questionnaire approach is best suited for ascertaining the technical, factual aspects of control: it does so by categorising response patterns into a pre-worked out format. If we accept that the mechanical, technical aspects of control are only part of the story, then the more informal, unstructured approach through interview seems more likely to embrace the personal, human elements in control as a complement to the mechanical. In the event, the seven managers of this organization spent a major part of their interviews with the writer talking about the technical and mechanical aspects of control as far as it affected their jobs. However, some of the managers gave interesting insights into what may be described as their "perceived power position" in the organization. We should not be excessively surprised that this occurred, since we have already perceived the close linkage between power and control and the loose agenda of the interview allowed the participants to reveal these more personal elements than a more rigid formula for exchanging ideas.

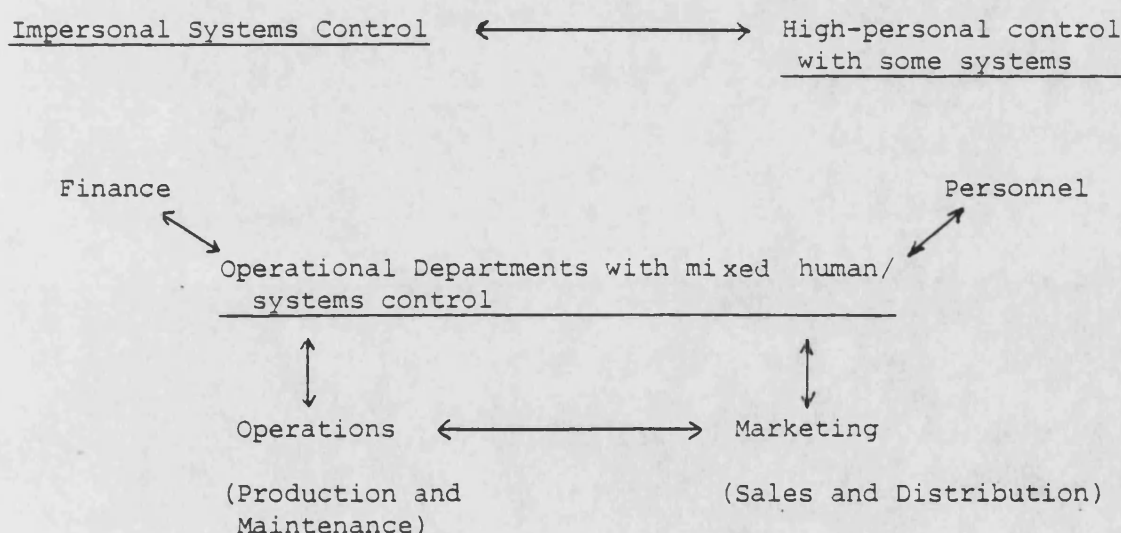
In re-visiting the actors in this piece, the writer is keenly aware that the emphases lie between the scientific path which leads

from what happens to theoretical frameworks which are applicable to all organizations regardless of their circumstances, and the path of contingency which reduces all situations to the individual and allows in the personal, human element. The reality is that which may be expressed in less extreme terms, but it does attempt to gather in the human dimension and set it alongside the factual element in control as being representative of the spirit of implementation.

The Managing Director demonstrated his own position as being the conductor of medium/small-sized orchestra, who relied on a combination of his subordinate managers and standing procedures to do the job of control. At the centre of his contribution was the "centralised executive group" which consisted of him and the managers of finance, operations and general marketing - a kind of inner cabinet. The hallmark of his manner of controlling the organization was the use of senior subordinates to work within certain targets and criteria, and relying upon them to draw exceptional circumstances to his attention so that swift remedial action could take place should it be necessary. The accountability of responsibility down the line was particularly evident in the commercial activities of the organization, which were described as a "pyramid". The use of systems in control by this manager could be seen in his emphasis of the budgetary plan for monitoring departmental performance and in the computerization of financial and physical operations. Of necessity, the amount of direct personal control and contact exercised by the managing director outside his immediate subordinate managers was limited. There was, however, an important initiative stemming from this manager to establish informal group

leaders on the industrial relations front of the organization. His approach to control may be characterized by the style of the all-rounder occupying the foremost position, who used a variety of techniques and forms of accountability through the organization to strike a balance of application to this key task of management.

The Finance Manager put forward the position that he saw control as the primary structural/technical task in front of management. More than any other manager in this organization, he stressed that he controlled a number of people and functions, who in turn controlled everything that went on in the organization. The effect of this encounter was to emphasize the de-personalising of control almost completely. This effect is not surprising if we look at the nature of the finance function as a network of systems and cost criteria to the whole organization according to the following model:



Although it is a common feature of business organizations for departments to see themselves at centre stage of the activities of a concern, the finance manager made it very clear that, although his was a service function away from the source of goods production and marketing, the criteria stemming from his department were the ultimate by which this organization's performance was judged and that impersonal control was the only way forward for his department. His personal style was well-attuned to the nature of the control task at hand.

The General Marketing Manager, in contrast to his finance counterpart, revealed an essentially balanced and broadly-based perspective on the control that was appropriate in his field. The nature of the responsibilities in the area would seem to indicate this by virtue of contact with the customer, liaison with the production facilities and the scope for "encouraging creativity and innovation" that was not always present in the other functional areas. The control established through the mix of the marketing policy contained all the elements - routine physical control, reports and the handling of people, as well as the scope for innovation in the implementation of that policy. The amount of freedom granted by the Managing Director to subordinate managers to operate and control their domain was also the subject of special comment in this area.

The Operations Manager saw her position in a structural sense as second only to the Managing Director, since she had longer experience in post and better qualifications than any other manager in the organization. This was one of two examples encountered where the style and importance of the control exercised was demonstrably linked to the

political dimension of power as perceived by the incumbent. Responsible for all production, maintenance and quality control, she put forward her operations as the centrepiece for control for the whole organization, especially emphasising primacy over the financial criteria which had been so firmly expressed by a more junior co-manager. Technical means of control were in abundance - written specifications, criteria for working, and feedback through reports. More than any other person in this organization, this manager undertook personal inspection and interaction with subordinate staff. The substance of control was widespread and evident, and was a powerful demonstration when coupled with the experience and organizational ambition of this person.

The Distribution Manager spoke of limited and largely "automatically-applied" forms of control in the area of the physical distribution of the products. The premium was on the efficient use of transport through delivery schedules, call rates and thereby controlling the competition through the efficient arm of sales. Such personal control as was described by this manager was rather paternalistic in its essence.

The Sales Manager was the most reluctant actor in the piece, revealing only the most meagre insights into his perspectives on control. As the only managerial representative of the French interest in this company, he displayed a sense of isolation in his sphere of operations which seemed to stem from cultural factors, especially in the sense that he was unable to communicate with his staff in the lingua franca. His control was carried out through several subordinate

managers, whereas from his point of view sales objectives, sales targets, call ratios and weekly reports were the bureaucratic bastion on which he relied heavily. A form of "political" sensitivity may have been built into this managerial position and its incumbent by virtue of the fact that his predecessor, also French, had been brought into the organization at a more senior level with direct access to the Managing Director. The relationship between power and control emerged as clearly in this encounter as with any manager in this organization, revealing a form of alienation from peers in the case of this actor which was as material as the nature of the control which he exercised.

The Personnel Manager, having the least power and measurable direct authority of all the managers, underlined this by his perspectives on control. He stressed the centralised system of control for the organization as a whole, allied to a "systems" approach by which each level of management and supervision had to take decisions; and hence to this extent responsibility was spread. Lacking status in the organization, this manager saw the pursuit of compromise as a major element in the control which he exercised throughout the organization.

Final Thoughts

The importance of different forms of control in the organization and their linkage to power in an appropriate form are not in question. The natures of the two phenomena, however, are clearer from our encounters. Power emerges as a state, passive in itself, and the "specification" by which a manager is able to get things done. It is a means, a capacity, a licence to move and essentially a pre-cursor to action.

By contrast, control is an active state, relating to an effect, a material outcome and an ability to move. To continue the analogy already made, if power is the specification for what managers do, control is the "delivery system" by which this is turned into managerial action.

From a theoretical standpoint, it would be wrong to treat control as in any way an isolated aspect of managerial activity. It is what it is as a result of four valencies which fashion the way in which control is seen to operate in the organization:

- Factors inherent in the managerial job (or that commissioning the control).

This is the closest to Weber's (1961) definition of the legitimacy built in to the positions of those in authority to act and control in the interests of the organization. Whether it be built into the manager's statement of functions or into the form of organizational accountability, this type of authority is essential to control and comes close to a definition of power that is officially proffered by the organization. In reality this type of authority rarely has to be stated in order to make it effective. Indeed, it is almost the case that whenever it is felt necessary to make it overt, it is likely to be an indication that the person concerned is in some way threatened or possibly perceives himself or herself in something of a weak position. The authority is essentially separate from the individual who occupies the position and to that extent is de-personalised.

Provided the organization is run on consistent lines, this authority

will pass on from one incumbent to another since it is vested in the position.

- Factors inherent in the personality of the controller.

The imprint of the special character of the incumbent of a position of authority may have a great effect on the nature and outcome of attempted control. From a theoretical point of view this factor is invariably ignored, even though it may have a significance which is greater than any structural variable when control is being attempted. Regardless of its theoretical standing in other quarters, it has its place in our quartet of valencies because of its potential in shaping the character as well as the outcomes of control. No list of qualities in the person of authority would be adequate to embrace this factor, although the drive and application of the manager might be commonly cited. This difficulty notwithstanding, the factor is ignored at our peril.

- Factors inherent in those being controlled.

The client population which receives control constitutes a force which may be important in fashioning the nature of the control or of affecting the success or otherwise of the outcome. Formally this factor may be evident in the organization of Trade Union activity, although this form was not particularly strong in Oriental Gas Products. It has been commented upon earlier that the voluntary act of joining an organization for work purposes builds in prima facie a form of submission to the general rules of control which are established by that organization. Within this general framework, however, the re-

action of those being controlled to the substance or the manner of application may be of importance in all but the most authoritarian regimes. Today a good number of organizations go as far as to build in a recognition of the factor of individual or group reaction to control as part of their managerial style and this is reflected in training and modes of consultation with employees. It is rare that an adverse reaction to control leads to the destruction of a managerial initiative altogether. It may, however, make the difference between willing, wholehearted support for managerial action and a limited, "rule-bound" approach which in no sense maximises the human input to a situation.

- Factors inherent in the situation.

The ultimate contingency when control is being instituted is that which is apparent at the very time of application, in which a combination of influences from the three other sets of factors described may be operative. The timing of a control initiative, its manner of application, as well as the presence of unforeseen, maverick factors may impinge upon the process of control in a way which may not have been predicted. Also under this heading is the situation in which the outcome of the attempted control is weighted in favour of a certain outcome by elements in the situation which are known but which are nonetheless special to the set of circumstances at the time that the control is being exercised. As with factors of the personality, the development of general theory has not been kind to factors inherent in the situation, usually consigning them to a "black box" or at best dignifying them with the description of contingency factors.

As the name implies, our four valencies are active forces with the capacity to combine. The nature of this combination, in turn, has

the capacity to make the outcome of the attempt to control more or less of a success. A great deal of what passes for control in an organizational setting is technical, systems-orientated in its nature, with boundaries which can be described in measureable terms and the operation of which can be set for automatic application. We should resist the temptation to conclude that for this reason it is free of values and political content. However technical a control may appear, it is never devoid of a social or political content for setting it up, even if that is claimed to be no more than the right to manage an enterprise. The very establishment of an organization is in itself a social and political statement from which the nature of control selected cannot be divorced, even though that statement may stand in the background unarticulated on a day-to-day basis.

The interviews with the manager on the nature of control provided an important contrast with fieldwork on the subject of power. As the agent of research, I was very aware of entering the very process of power during the discussions: the managers were demonstrating their perceptions on power and the role of the interviewer was part of that. This was not the case in discussing control. We were not involved in controlling anything except the course of our discussion. For this reason the perspectives on control tended to be more factual and objectively-based, and those on power went more directly to the heart of the individual's personal standing. Although the point did not emerge strongly from the managers interviewed, I drew the conclusion that control in this organization emanated from the base of society. Like power, control had as its heart a quasi-legal basis to operate the affairs of an organization.

The manifold forms of control had their counterparts in the practices of numerous manufacturing and business concerns, and hence there were strong parallels across society, as well as drawing the basis for action from society. Although the possession of power does not always result in forms of control, the two are closely related on many occasions, the one providing the means and framework for the other.

Control emerged from the fieldwork as much more than a physical set of contact points on the track of the organization. It could be a deceptive phenomenon insofar as many of its forms appeared to be permanently in place, with pre-set limitations and somewhat impersonal in its application. The reality was a situation which was far more dynamic, resulting from the interplay of the four valencies outlined, drawing on the features of managerial job, the distinctive touch of the incumbent, the receptivity of those being controlled, the special characteristics of the situation, which could vary the outcome of initiatives a great deal. Once again, the manager emerged as the key actor on the stage, drawing together his subjective reality with the given facts of his job and the situation, and the groups of subordinates, who were most affected by the different forms of personal and material control.

One of the most striking features of control as perceived through the eyes of the managers in comparison to the nature of the subject as it is treated in the literature is the great emphasis laid by the managers on control being seen as a structural or technical task confronting them. This came out with each of the seven managers, implying that they saw this area of activity as, in effect, a law unto itself. If there was the thought in their minds that control was in

some way linked to the amount of power which they possessed in their position, it did not emerge strongly from the encounters. This may have been the case since to some respondents the link between power and control was self-evident and there was no pressure from the lightly-set agenda of the interviews to make this point. It is possible that we see elements of the literature, as illustrated by March and Simon (1958), Blau (1964), Weber (1948), Dahl (1957) and Tannenbaum (1968), effecting a conceptual link-up between the areas of power and control which is attractive to writers, but which does not mean a great deal to practising managers. Out of the four dimensions being examined in this work, control is arguably the most tangible, down-to-earth, and pragmatically-treated of the four. Is it surprising then that managers, who are practical in orientation and not necessarily versed in the literature, treat the subject with such a practical single-mindedness?

The same may also be said of those aspects of the literature, as demonstrated by Salaman (1981) and Clegg (1979), which represent control as a demonstration of the wider elements of control established by society or the prevailing political climate of the day. It could be asked whether the managers, who are clearly representatives of an elite section of the society in which they operate, have any interest in declaring that they owe their ability to control situations and people to this wider influence outside the organization in which they work. On a highly personal level, a parallel to this situation might be seen in the reluctance of a man or a woman to discuss the social, legal, psychological and physical elements of the marriage bonds which unite them. The state is

essentially one of "getting on with it" once the initial arrangements have been entered into, for to raise these fundamental issues about the bases for the union may either be seen to be redundant in the first place or posing a threat because they are being re-examined so publicly.

CHAPTER 7

ORGANIZATIONS AND THEIR ENVIRONMENTS

The general trend in organization analysis in the early decades of this century moved towards concern for the internal workings of organizations, most notably in the scientific management and human relations movements. As early as 1859, when Darwin published "The Origin of Species by Means of Natural Selection", modern genetics was beginning to alter our understanding of the variance upon which natural selection operates. Even with this development of knowledge, most theorists of change have continued to focus upon the internal inter-dependencies of systems - biological, psychological, or social - although the external environments of these systems are changing more rapidly than ever before. Von Bertalanffy (1950) was one of the first to reveal fully the importance of a system being open or closed to the environment in distinguishing living from inanimate systems, although his formulation did not in detail deal with those processes in the environment itself which were the determining conditions of exchange. Selznick (1949), in his study of the Tennessee Valley Authority, demonstrated how influential external factors could be upon the internal dynamics of the organization. This study was followed up in 1960 by an analysis of environmental impact upon the U.S. Communist Party. Bendix (1956) and Abegglen (1958) conducted research in this tradition by examining the relationship between entrepreneurial and managerial ideologies within business organizations and the social structure which embraced them. Weber (1968), also, by historical and compara-

tive studies examined the effect of social structure on bureaucracy.

The parallel efforts of economists and anthropologists have at the same time impinged upon the discussion of organizations and their settings. The theory of the firm in economics treats the relationship of a single organization to its environment and posits that organizational decisions concerning price and output are the outcome of market forces (e.g. Stigler, 1968). Some industrial organization economists have developed this theme by outlining the ability of organizations to acquire market power and to modify their environments (Phillips, 1960, Scherer, 1970). Certain anthropologists incorporated the environment into their theories with the concept of societal evolution (White 1949, Sahlins and Service, 1960), and a similar interest in societal evolution occurred in sociology (Parsons, 1956).

The numerous attempts to characterize the nature of environmental - organizational relations cannot be described as an historical flow of ideas leading to comprehensive insight which may be applied to all organizations. It is more appropriate to see them as a series of perspectives which have been developed to explore different aspects of the relationship, some endeavouring a comprehensive statement, others limited to the situation in which research was carried out:

- a) Those concentrating on the role of information as part of the transaction between organizations and their environments, notably Dill (1958, 1962), Lawrence and Lorsch (1967), Duncan (1972) and Aldrich and Mindlin (1978).
- b) The approach emphasizing the causal texture of the relationship between organizations and environment, causing action in some cases and inhibiting it in others (Emery and Trist, 1965).

- c) The emphasis on the uncertainty which organizations face, leading to decisions based upon contingency and strategic choices available, as seen in Burns and Stalker (1961), Lawrence and Lorsch (1967), Duncan (1972) amongst others.
- d) The perspective of natural selection, whereby factors in the environment select characteristics of the organization in terms of how they best fit the environment, as developed initially by Hawley (1950, 1969) and Campbell (1969). Extensions of these ideas are evident in discussion on the resource dependency of organizations (Pfeffer and Salancik, 1978) and the population ecology model developed, inter alia, by Hannan and Freeman (1974) and Aldrich (1979).

Dill (1958, 1962) was one of the earlier proponents of the idea that structures and activities in organizations are affected by the differences in the way information crosses organizational boundaries. A major concern of those who adopt this perspective is with decision processes within organizations and with the conditions under which information is perceived and interpreted by participants. Dill's work originated in two contrasting organizations in Norway, one manufacturing and selling clothing, the other a sales engineering and contracting firm. This research differentiated between the task environment, which constituted the inputs of information to the organization, and tasks, which were cognitive formulations on what needed to be done as a result of receiving this information by members of the organization. A further distinction was made between those things that the organization does (activities), things that the organization sets itself to do (tasks), and the stimuli that the organization might

respond to (task environment).

According to Dill (1962): "It is not the supplier or the customer himself that counts, but the information that he makes accessible to the organization being studied about his goals, the conditions under which he will enter into a contract, or other aspects of his behavior". In this perspective the environment should be treated as information made available to organizations or to which organizations, via search activity, may gain access. Different aspects of the situation may then be pursued: the process by which organizations are exposed to different kinds of information, the readiness of participants to attend to and retain information, and organizational strategies for searching their environments. Dill placed heavy emphasis on organizations as information-processing systems and on the way organizations learn about their environments.

In some of the empirical work carried out to explore the interaction of organizations and environments through the medium of the information involved, the writers found it necessary to differentiate between their insights and the perceptions of decision-makers with regard to the environment. Lawrence and Lorsch (1967) found themselves in this position in looking at the production, research, and sales activities in three different industries and the amount of integration and differentiation that was apparent leading to organizational performance. Here it is appropriate that a debt should be acknowledged to the symbolic interactionist perspective in social psychology, asserting that the study of interaction should be from the position of actors themselves, rather than from the a priori assumption that persons share a system of culturally established symbols and

agreed-upon meanings. Blumer (1966) argued that "since action is forged by the actor out of what he perceives, interprets, and judges, one would have to see the operating situation as the actor sees it, perceive objects as the actor perceives them, ascertain their meaning in terms of the meaning they have for the actor, and follow the actor's line of conduct as the actor organizes it - in short, one would have to take the role of the actor and see the world from his standpoint".

Aldrich and Mindlin (1978) also took up the theme that the perceptions of decision-makers about the organization's environment are more critical in this perspective than the actual constructs of the environment. Duncan (1972) had earlier stressed members' perceptions rather than objective indicators, except that he was concerned with the structural arrangements of the parts of the organization rather than the total unit. His unit of analysis was an organizational decision unit, defined as "a formally specified work group within the organization under a supervisor charged with a formally defined set of responsibilities directed toward the attainment of the goals of the organization" (Duncan, 1972, p. 313). The units' environments were characterized as either internal or external and as composed of two basic dimensions: simple-complex, and static-dynamic, corresponding roughly to whether the environments were homogeneous or heterogeneous, stable or unstable. Both dimensions interacting with each other were proposed to affect the extent to which unit members would perceive their environments as uncertain. He concluded that the dimension covering stability - instability was more important than whether the environment was homogeneous or otherwise.

The ideas concerning the role of the organization as a processor of information from the environment or as a play having its reality through the eyes of the actor were influenced by a closed-system model of thinking. It was logical that those who examined organizations should move from the basis of the organism as such to explore the dynamic of relations between the organization and its environment in the context of an open systems model. Von Bertalanffy (1950) first used the term of the general transport equation to discuss openness or closedness to the environment as a means of distinguishing living organisms from inanimate objects. He put forward the view that in comparison to physical objects, a living entity survives by importing into itself certain types of material from its environment, transforming these in accordance with its own system characteristics, and exporting other types back into the environment. By this process the organism is seen as obtaining additional energy that renders it "negentropic"; it becomes capable of attaining stability in a time-independent steady state - a necessary condition of adaptability to environmental variance. Emery and Trist (1965) perceived that such steady states are very different affairs from the equilibrium states described in classical physics, which had too readily been taken as models representing biological and social transactions. They further noted that while Von Bertalanffy's formulation defined exchange processes between the organism, or organization, and elements in its environment to be dealt with in a new perspective, it does not deal at all with those processes in the environment itself which are among the determining conditions of the exchange. It was for this reason that they re-introduced at the social level of analy-

sis an additional concept - the causal texture of the environment - which was a term originally suggested by Tolman and Brunswick (1935) and drawn from Pepper (1934).

Research into a number of different organizations led Emery and Trist to re-define the causal texture of the environment as a quasi-independent domain, containing four "ideal types" of causal texture which were deemed to be approximations of those which existed in the "real world" of most organizations, although their weighting would vary enormously from case to case. Their typology of environments was as follows:

- a) The placid, randomized environment. This is the simplest type of environmental texture in which the goals and the potentially good or bad influences affecting such goals are relatively unchanging in themselves and randomly distributed. Under these conditions an organization can exist without great difficulty and adapt to its environment as a single and indeed quite a small unit. Schutzenberger (1954) found that the critical property of organizational response under random conditions was the lack of distinction between tactics and strategy. In his view, "the optional strategy is just the simple tactic of attempting to do one's best on a purely local basis" (1954, p. 101). Moreover, Ashby (1960) stated, "the best tactic.... can be learned only by trial and error and only for a particular class of local environmental variances."
- b) The placid, clustered environment. Although this type of environment is still placid, it is more complicated than that just described insofar as certain features display clustering:

goals and influence are not randomly distributed but hang together in certain ways. Survival becomes more precarious if the organization attempts to deal tactically with each environmental variance as it occurs as it may have done under (a).

The new feature of organizational response to this kind of environment is the emergence of strategy as distinct from tactics. According to Selznick (1957) it will be necessary for organizations to develop a "distinctive competence" in order to achieve its objectives. Also, Emery and Trist (1965) suggest, there will be tendency under these conditions for organizations to grow in size and to become hierarchical and more centralised in control and co-ordination.

- c) The disturbed-reactive environment. At this level of causal texturing, the main difference from the placid/clustered environment is the presence of more than one organization of the same kind or an oligopolistic market, as described, by economists. Each organization does not simply have to take account of the others when they meet at random, but has also to consider that what it knows can also be known by the others. The part of the environment to which it wishes to move itself in the long run is also the part to which the others seek to move. Knowing this, each will wish to improve its own chances by hindering the others, and each will know that the others must not only wish to do likewise, but also know that each knows this. In this level of environment, an intermediate level of organizational response appears to be necessary - that of the operation - to use the term adopted by German and Soviet military

theorists. An operation, which is distinguished from tactics and strategy, consists of a campaign involving a planned series of initiatives, calculated reactions by others, and counter-actions. The flexibility required for such an operation encourages a certain amount of decentralization and puts a premium on quality and speed of decision-making. The type of challenge involved in this environment may involve careful consideration over when to encounter and when not; it may also involve a certain coming-to-terms between competitors, whether they be enterprises, interest groups, or governments.

- d) Turbulent fields. In this type of environment the dynamic processes are more complex than with the other three levels and the significant variances for the component organizations arise from the field itself. The turbulence may also be exacerbated by the deepening interdependence between the economic and other facets of society and an increasing reliance on research and development to achieve the capacity to meet competitive challenge. For organizations, these trends mean a gross increase in their area of relevant uncertainty: the consequences which flow from their actions may lead off in ways that become increasingly unpredictable.

By their four stage typology, Emery and Trist created a bridge between those who saw organizations as processors of information from and to their environments and the differing degrees of uncertainty and turbulence which affect organizations in real life. The awareness of uncertainty and the need to cope with turbulence led some writers to question an excessively definitive approach to relations between

organizations and their environments and to stress that a great deal depended on the contingencies of the situation.

An important piece of research carried out in Scotland opened up the question of the reaction of organizations to their environmental contingencies particularly that of the impact of technological innovation. Burns and Stalker (1961) studied the attempt to introduce electronics development work into traditional Scottish firms, with a view to their entering this modern and rapidly expanding industry as the markets for their own well-established products diminished. The various difficulties which these firms faced in adjusting to the new situation of continuously changing technology and markets led the authors to describe two "ideal types" of management organization which are at the extreme points of a continuum along which they claimed most organizations can be placed. The first type of organization which they characterized was called "mechanistic", corresponding quite closely to Weber's (1947) rational-legal bureaucracy. They concluded that this type of organization is best adapted to relatively stable conditions. Within such an organization the problems and tasks of management are broken down into specialisms within which each individual carries out his assigned, precisely defined, task. There is a clear hierarchy of control, and the responsibility for overall knowledge and co-ordination rests exclusively at the top of the hierarchy. Vertical communication and interaction between superiors and subordinates is emphasized, and there is an insistence on loyalty to the concern and obedience to superiors.

Burns and Stalker contrasted this traditional type of organization with that which they described as "organismic" (also called

organic). In this alternative environment the organization is adapted to unstable conditions when new and unfamiliar problems continually arise which cannot be broken down and distributed for solution among the existing specialist roles. This situation calls for a continual adjustment and a re-definition of individual tasks, placing the emphasis on the contributive rather than the restrictive nature of specialist knowledge. The organic type of organization requires that interactions and communication may occur at any level as required by the process, with the corollary that a much higher degree of commitment to the aims of the organization as a whole is generated. Under this system, organization charts laying down exact functions and responsibilities of each individual are not found, and indeed their use may be explicitly rejected as hampering the efficient functioning of the organisation. A major conclusion drawn from the research was the doubt expressed over whether a mechanistic firm can consciously change into an organismic one. The authors cited the almost total failure of the traditional Scottish firms to absorb electronics research and development engineers into their organizations. They claimed that this situation developed because the individual in a mechanistic organization is not only committed to the organization as a whole: he is also a member of a group or department with a career structure and a party to sectional interests in conflict with those of other groups. Power struggles may develop between established sections to obtain control of new functions and resources. In turns, the out-of-date mechanistic system endeavours to perpetuate itself and "pathological" systems may develop. Pathological systems, therefore, are attempts by mechanistic organization to cope with new problems of change, innova-

tion and uncertainty while sticking to the formal bureaucratic structure and not adapting along more organic lines.

Burns and Stalker described some typical reactions by organizations in circumstances in which pathological systems were established. In a mechanistic organization the normal procedure for dealing with a matter outside an individual's sphere of responsibility is to refer it to the appropriate specialist or, failing that, to a superior. In a rapidly changing situation the need for such consultations occurs frequently; and in many instances the superior has to put up the matter higher still. A heavy load of such decisions finds its way to the chief executive and it soon becomes apparent that many decisions can only be made by going to the top. This situation is described as the "ambiguous figure system" of an official hierarchy and a non-officially-recognized system of pair relationships between the chief executive and some dozens of people at different positions below him in the management structure. In these circumstances the head of the concern is overloaded with work, and many senior managers whose status depends on the functioning of the formal system feel frustrated at being by-passed.

Another type of response witnessed in mechanistic organizations is the attempt to cope with problems of communications by creating more branches of the bureaucratic hierarchy, such as contract managers, liaison officers and expeditors. This leads to a system described as the "mechanistic jungle", in which a new job or even a whole new department may be created, whose existence depends on the perpetuation of the difficulties which created it. A third type of pathological response noted by Burns and Stalker is the "super personal or

committee system". A committee is a time-honoured way of dealing with temporary problems which cannot be solved within a single individual's role without upsetting the balance of power. However, as a permanent device it is inefficient, in that it has to compete with the loyalty demanded and career structure offered by the traditional departments. In the organizations examined by the authors, permanent committees were tried only sporadically, since they were disliked as being typical of inefficient government administration: they were unable to develop as a super-person to fulfill a continuing function in the manner of a powerful individual.

Burns and Stalker conceived of organizations functioning simultaneously under at least three social systems. The first of these systems derived from the aims of the organization, its technology, and its attempts to come to terms with its environment. This is the overt system which embraces all discussion about decision-making. Secondly, organizations are co-operative systems of people who have career aspirations, a career structure, and who compete for advancement. Therefore, decisions taken in the overt structure inevitably affect the different career prospects of members, who will evaluate them in terms of the career system as well as the formal system, and will react accordingly. This leads to the third system of relationships in the organization - its political system. It is difficult to imagine any organization of people which does not, in some sense have its own "political" activity in which individuals and units compete or co-operate for power. Again, all decisions in the overt system are evaluated for their relative impact on the power structure as well as for their contribution to the achievement of the organization's goals.

Burns and Stalker brought to the fore the whole question of the ways in which organizations may deal with environmental influences of different complexity and uncertainty. They did not argue that one type of system was more effective than the other, but that each was more effective in a given environment. In highly stable and predictable environments, where markets and technological conditions remain largely unchanged over time, the mechanistic system is the more appropriate organizational design. Since the environment is highly predictable under such conditions, it is possible to routinize tasks and centralize decisions in order to maximize efficiency and effectiveness. On the other hand, where the environment is a constant state of flux and where an organization has to change direction constantly to adapt to its environment, an organic system is more appropriate because of added flexibility and adaptability.

Lawrence and Lorsch (1967) endeavoured to build upon this work by throwing light upon the structural dimensions which correspond to given environmental dimensions. They did this by examining decision-maker's perceptions of environment in the areas of foods, plastics and containers, in six organizations selected for their varying degrees of success. The performance measures used to rank the organizations included change in profits in the past five years and new products introduced in the five years prior to the research as a percentage of the current sales. They studied the effects of environment on two structural characteristics of organizations - differentiation and integration. Structural differentiation was described by Lawrence and Lorsch as "the difference in cognitive and emotional orientations among managers in different functional departments". Ordinarily the

term differentiation might refer to the degree of specialization amongst personnel in a department. However, Lawrence and Lorsch extended the definition into the psychological dimension to refer also to the extent to which managers in different departments differed in attitudes and behavioural orientation. The greater the psychological distance between managers in different departments, the greater the differentiation. Integration referred to "the quality of the state of collaboration that exists among departments that are required to achieve unity of effort by the demands of the environment", and hence is concerned with the nature and quality of interdepartmental relations as well as the processes by which such relations are achieved.

The research of Lawrence and Lorsch examined the degree of integration and differentiation between three organizational sub-systems of the industrial concerns under review - production, sales, and the research departments. They found that organizations which operated in more dynamic, complex environments such as the plastics industry tended to exhibit a greater degree of differentiation between functional departments than did those firms operating in less turbulent environments, such as the container industry. The food industry studies, which operated in a moderately dynamic environment, exhibited a moderate degree of differentiation. The authors interpreted their findings as showing that when decision-making perceive their environments as unstable and uncertain, their organizations are more effective if they are less formalized, decentralized, and have a personal orientation in inter-member contacts. Under conditions of greater perceived certainty, however, a more formalized, centralized, and standardized structure sufficed.

Generally, successful concerns within each industry had higher scores than unsuccessful concerns for both differentiation and integration. Therefore, it appeared that a characteristic of the more effective organization was its capacity to achieve an optional balance of differentiation and integration that is consistent with environmental demands. A hallmark of less effective organizations, on the other hand, was the inability to grant various departments sufficient latitude to increase their contributions to organizational goals through functional specialization; another was the inability to devise sufficient means to integrate and co-ordinate these diverse departments in order to achieve success. Lawrence and Lorsch therefore concluded that the internal structure of effective organizations will differ depending on the dimensions of the environment. In a diverse, dynamic environment, the effective organization must be highly differentiated and integrated: in a more stable, less diverse environment, the organization must be less differentiated but retain a high degree of integration. The scope and nature of these findings are more comprehensive than those reported by Burns and Stalker. However, the basic conclusions are similar: environment does play an important role in the relation between structuring activities and organizational effectiveness.

Hall (1968) was one of the early critics of Lawrence and Lorsch's study, pointing out that they provided no information on the causal mechanisms by which experimental influences entered organizations. He also claimed that in their research design they failed to take account of other environmental pressures, original differences in structure between the firms studied, historical factors in the deve-

lopment of the firms, and differences within the industries in orientation and practice. In their defence, Lawrence and Lorsch (1973) pointed out to their critics that they had only set out to conduct a clinical study rather than a highly quantitative, rigorously controlled field study, and that their conclusions owed much to their clinical and professional insight as to the rudimentary data analysis presented.

Duncan (1972) used an approach which was similar to that of Lawrence and Lorsch in that he used members' perceptions rather than objective indicators and was concerned with the structural arrangements of subunits rather than organizations as wholes. The focus of analysis in the research was the decision unit, defined as "a formally specified work group within the organization under a supervisor charged with a formally defined set of responsibilities directed toward the attainment of the goals of the organization". The sample consisted of ten decision units in three manufacturing firms and twelve decision units in three research and development organizations. the environments of the units were broken down between the internal and the external and as composed of two basic dimensions: simple-complex, and static-dynamic. Both dimensions were seen as affecting the extent to which unit members perceived their environments as uncertain, ranging from low-perceived uncertainty under homogeneous and stable conditions to high-perceived uncertainty under heterogeneous and unstable conditions. Aldrich (1979) criticised Duncan's study insofar as he had concluded that organizational type - manufacturing, or research and development - is important in understanding environmental uncertainty, but not as important as environmental type.

He noted that Duncan had not asked whether organizational type (form) was strongly associated with the type of internal environment facing an organizational subunit. Amongst the ten decision groups in the manufacturing firms, seven fell into the simple-static cell of cross-tabulation of the two environmental dimensions, with none in the 'dynamic-complex' cell. Similarly, of the twelve decision groups in the research and development firms, seven fell into the "dynamic-complex" cell and none into the "simple-static" cell. The results suggested that organizational form is strongly related to the environment decision groups operate in, and that perhaps organizational form and environmental type were confounded in Duncan's analysis.

Criticisms of the structural-contingency approach to environmental uncertainty of Lawrence and Lorsch and Duncan continued. Tosi, Aldag and Storey (1973) attempted a replication study of the approach of Lawrence and Lorsch with a group of 102 middle and top level managers who were thought to be knowledgeable about conditions in their industries. The coefficients of reliability for the subjective measures of Lawrence and Lorsch were very low and the correlations between items were also low and inconsistent. Downey, Hellriegel and Slocum (1975) also found wide discrepancies in their replication of this work together with that of Duncan. The lack of significant association between perceived uncertainty and the "objective" criterion in the studies of Tosi et al. and Downey et al. may point to the unreliable nature of the instruments which they used and possibly to the extent to which those researching into environmental influences at that time had overstretched themselves in seeking clean-cut relationships. The relationship between environmental uncertainty and partici-

pants' perceptions may have been much more complex than the simple linear functions specified by the investigators. According to Aldrich (1979), "Downey and his colleagues may well be right in concluding that a disaggregated view of organization-environment interaction, relating specific uncertainties to specific behaviours, is the better research strategy to pursue than that followed in the past. Such research would also take into account the personal characteristics of role incumbents such as tolerance for ambiguity, professional training and previous experience".

The complexities and inter-related elements in organizational analysis have already been evident in the location of the work of Lawrence and Lorsch and Duncan in terms of a transaction of information between environment and the organization, as well as in decisions based upon contingencies and strategic choice. A number of researchers also endeavoured to extend the definition of relations between the organization and its environment to include the "internal environment", sometimes referred to as the contextual dimension, covering largely the element of size and technology. Blau (1970) attempted to show that size is the major determinant of structure; Woodward (1965) argued that operations technology is important; whilst Perrow (1967) put forward the view that the routineness of tasks is the most important determinant. The relevance of size and technology in the structuring of activities was also emphasized in the work of the Aston Group (Pugh and Hickson, 1976) who conducted two major studies in what they saw to be seven primary dimensions of organizational context - origin and history, ownership and control, size, charter, technology, location and dependence on other organizations - and whether they were

related to three structural variables. These variables were: 1. the structuring of activities, that is, the degree to which the intended behaviour of employees is overtly defined by task specialization, standardized routines, and formal paperwork: 2. the concentration of authority, that is, the degree to which authority for decisions rests in controlling units outside the organization and is centralized at the higher hierarchical levels within: 3. the line control of work flow, that is, the degree to which control is exercised by line personnel rather than through impersonal procedures. In a research which covered forty-six organizations in the English Midlands, Pugh and his associates found that two contextual variables (size and technology) predicted the structuring of activities to a high degree. Two other contextual variables (dependence and location) were found to predict the concentration of authority to an equally high degree. In a replication study carried out in 1970 using abbreviated measures of the original work, the structuring of activities (which embraced role and functional specialization, standardization, and formalization) was found to be primarily related to the size of the organization and, to a lesser extent, technology.

In the view of Hannan and Freeman (1974) many of the environmental relationships described so far are concerned with the process of selection or the adaptation perspective. According to this perspective, sub-units of the organization, usually manager or dominant coalitions, scan the relevant environment for opportunities and threats, formulate strategic responses, and adjust organization structure accordingly. Such adaptation goes on with or without a recognition by the managers concerned of the technological imperatives of

size, technology etc., which may be placed on them by the nature of their organizations. It is assumed by those who follow this view that there is a hierarchy of authority and control that locates decisions concerning organization as a whole at the top. It follows that organizations are affected by their environments according to the ways in which managers or leaders formulate strategies, make decisions and implement them. Successful managers are, therefore, seen to be those who buffer their organizations from environmental disturbances or to arrange smooth adjustments that require minimal disruption of organization structure.

Hannan and Freeman go on to develop the idea that, whilst at least some of the relationship between structure and environment must reflect adaptive behaviour or learning, there is no reason to presume that the great structural variability among organisations reflects only or even primarily adaptation. They see a number of limitations on the ability of organizations to adapt, such as difficulty in converting plant and equipment to other tasks, limitations on information received, and constraints on organizations by their own internal politics or indeed their own history. Externally, they cite legal and fiscal barriers to entry and exit from markets, external information received, and market forces as potentially inhibiting factors to the adaptability of the organizations. Certain of these pressures can be accommodated within the adaptation framework, but the writers propose that the deficiencies which are left can only be dealt with by supplementary the adaptation perspective by turning to a selection orientation.

Hannan and Freeman acknowledged that their population ecology

model was based upon the natural selection model of biological ecology formulated by Hawley (1950). Subsequently elaborated by Campbell (1969), this model sets out to explain organizational change by examining the nature and distribution of resources in organizations' environments. The model is not intended to account for short-run changes, which may be temporary responses to local conditions, but rather for long term transformations in the form of social organization. A point which is central to the model is the principle of isomorphism. This principle asserts that there is a one-to-one correspondence between structural elements of social organization and those units that mediate flows of essential resources into the system. It explains the variations of organizational forms in equilibrium. Environmental pressures make competition for resources the central force in organizational activities and the notion that organizations are resource-dependent therefore focuses on tactics and strategies used by authorities in seeking to manage their environments and their organizations.

Aldrich (1979) outlined the three stages of the general model - variation, selection and retention - in organizational change, which were put forward to explain how organizational forms are created, survive or fail, and are diffused throughout a population. Organizational forms - specific configurations of goals, boundaries, and activities - are the elements selected by environmental criteria, and change may occur either through new forms eliminating old ones or through modification of existing forms. Aldrich went on to define separately organizational "niches" as distinct combinations of resources and other constraints that are sufficient to support an or-

ganizational form. The pressures of selection may point to the retention or elimination of entire groups of organizations, such as industries, and therefore the changing population distribution or organizations in a society may reflect the operation of such selection pressure. These ideas gave rise to the notion that organizations are "loosely coupled systems", so it is possible for them to change at the level of specific activities or components, including the number of departments, decision-making styles, or control structure.

The three stages in the natural selection or popular ecology model are pursued in direct analogy to the biological sciences:-

1. Variation

Variation within and between organizations is the first requirement for organizational change, as well as variations across environments if externally directed change is to occur. In particular two types of variation are perceived by Campbell (1969) and Aldrich (1979) to create the situation in which external selection pressures may affect the direction of such organizational change. Firstly, there are variations between organizations in their overall form - between industries, within industries, across the public and private sectors and indeed communities. Increased exposure to ideas from other societies and cultures, such as witnessed in the spread of multi-national corporations, have impelled such variation. Secondly, variations within organizations have opened them up to the potential for change or transformation. Growth is often tied to increasing environmental munificence leading to a differentiation in technology, functions and procedures, which may take place alongside turnover of members and

leaders and random deviation from standard practice.

2. Selection

The selection of view or changed organizational forms occurs in the first instance as a result of environmental constraints. Those organizations which fit environmental criteria are positively selected and survive, whereas others will fail or be forced to change to match environmental criteria. In order that this might take place, environments are described in terms of either the resources or the information which they make available to organizations. Such an emphasis on information relies heavily on theories of perception, cognition and decision-making, with organizational members acting upon such information they can glean from their environments. Changes in communication technology, improvements in methods of recording and storing information, the breakdown of barriers to information flow, and innovations that improve people's understanding of their environments are but some of the factors that may give rise to changes in organizational forms. Environments are also seen as consisting of resources for which organizations compete. Selection therefore occurs through relative rather than absolute superiority in acquiring resources; and resources can be ranked in terms of why they are sought - liquidity, stability, universality or a lack of alternatives. Each distinct combination of resources and other constraints that act in support of an organizational form constitutes a niche, which is defined in ecological terms as "any viable mode of living".

3. Retention

The third stage of the model refers to those forces which retain

and preserve those organizational forms which have been successfully sifted through the two earlier processes. In the process of industrialization there has been a trend towards rationalizing culture and making it visible; oral traditions are now less important, being replaced by more material artefacts such as written records, machinery and electronic information transmitted and retrieval systems. The state also plays its part in the creation and maintenance of organizations. In pursuing policies aimed at political stability and legitimation of ideologies, the development of educational systems, improving transport and communication networks, a judicial system and state support for organizations may in their different ways be seen as means of creating an infrastructure for organizational forms to be perpetuated.

Aldrich (1979) is ready to point out that the natural selection model is not a simple-minded application of the "survival of the fittest" principle, as portrayed by the conservative Darwinists. It is not always the case that the "fittest" survive, given the elements of luck and chance that can be brought to bear on given circumstances. Persons and organizations may in themselves be perfectly "fit", but may still fail if they happen to be in the wrong place at the wrong time. It is not universally true that fitness determines survival. The natural selection model refers to a tendency for those species and organizations most fit in relation to their environments to survive.

An alternative model of environmental effects was put forward by Pfeffer and Salancik (1978). They represented the mechanism by which they perceived organizational environments affecting organizations as a sequence:

1. Environment (source of uncertainty, constraint, contingency).
2. Distribution of Power and Control within Organization.
3. Selection and Removal of Executives.
4. Organizational Actions and Structure.

Although this model may at first sight appear to be positivist and even deterministic in its cast, Pfeffer and Salancik are at pains to point out that it is only one possible model and that its purpose is to understand how the organization relates to other social actors in its environment. The emphasis they place in their work is the opposite of that so common in the literature of management, which suggests that effectiveness is a direct outcome of styles of management, good human relations, participation, and so on. They take the view that in order to survive, organizations need resources. Typically, acquiring resources means the organization must interact with others who control those resources. In that sense, organizations depend on their environments. The acquisition of resources may therefore be problematic and uncertain, as the organization does not necessarily control the resources it needs. Organizations have to transact with others for necessary resources, and control over resources provides others with power over the organization. Control within the organization thus takes on the dual nature of regulation from outside by the nature of resource availability and from inside by managerial fiat, whilst power is determined by the definition of social reality created by participants as well as by their control over resources.

The resource-dependence model developed by Pfeffer and Salancik was also a derivative of an approach adopted earlier by Hawley (1950) and Campbell (1969). Campbell himself was aware of the problems

associated with using such a model in which there were difficulties in terms of methodology in avoiding circular or tautological arguments. Critics argued whether it is valid to build explanations by retrospectively constructing rationales for changes that have already occurred. The dangers associated with natural selection in evolutionary theory is that differential survival rates are only known in retrospect. Scriven (1959) had even earlier tried to explain this problem in noting that "one cannot regard explanations as unsatisfactory when they do not contain Laws, or when they are not such as to enable the event in question to have been predicted". Aldrich (1979) went further in stating that "evolutionary explanations are scientifically legitimate, even though they cannot be used to predict the exact nature of changes". The case would appear to rest on the status of prediction and explanation. To predict requires that we establish a correlation between present and future events: to explain involves a different time perspective in that the correlation is established between past and present events. However, predictions can be made about events from indicators that are not the cause of events, such as in predicting changes in the weather by observing changes in barometric pressure. By the same token, meteorologists may be good at explaining weather patterns giving rise to violent storms even though they may be incapable of predicting when such storms will occur.

CHAPTER 8

THE ENVIRONMENTS THROUGH THE EYES OF THE BEHOLDER

The employee in an organization is usually aware of one or a number of environments under which his or her work is carried out. Typically, this will appear in the first instance as a supervisor or a manager in the form of a unit or department and ultimately the organization as a whole. In the case of Oriental Gas Products this line of environments also leads out to the associated international companies in the multi-national grouping of British and French interests (although very loosely-coupled from an organizational point of view) and to the global industry for the production of industrial gases which provides the yardstick of competition.

Another line for tracing successive environments is the physical or geographical. The organization is located in an area of a broader territory, which in turn is part of a country or the country itself. Normally it is possible to extend this organizational analogy into the environments provided by a regional setting and the international scene itself, with sub-definitions which could be economic, political or social in character.

The history of trying to characterize the nature of relations between organizations and their environments has been dominated by the notion that they are negotiating with one other, sending messages or information, and in some way transacting between the two dimensions or

any combination of them. The managers of Oriental Gas Products were well aware of the successive environments under which their company worked. Hence an important part of the encounter's with these actors in the piece was to explore their perception of their environments and to examine the pattern of interaction through their eyes. As elsewhere, the views are preceded in most cases by the statement of the subject at issue in parentheses:

Managing Director

[How do you perceive your environments, together with any special features which they contain?]

"There are certainly a number of different levels of environment which affect our organization. Let us take the broad picture first. On a global scale, we are affected by being members of two world-wide groups, therefore we see both systems and look for help and guidance to a world wide organization. In terms of our local environment, we have to live within a fabric of control that has been built up over a long period of time, a lot of which really stems from the nature of our organization from a safety point of view. A lot of the things that we have to be constantly discussing with government or applying to government for a dispensation on are those matters which affect safety and health in our community, which are difficult to enforce. Where we can influence our environment, though, is in establishing what will be the geographical scope of our operation. By taking a decision to include the neighbouring territory in China within our area of operation, we automatically bring in a whole new set of environmental considerations into our thinking, and we then often modify our policies."

[Do you find yourself having to lobby for political influence with the government in this territory?]

"We do and obviously we try in all areas to influence legislation to modify its impact on us. In some areas we have been more successful than in others, but certainly we do everything that we can."

[This form of environmental contact is very much identified with your position as Managing Director. Does it not affect your second line manager?]

"Oh no, it is very much to do with second line managers as well. For instance, the Distribution Manager is quite active on committees and so on in the formulation of traffic regulations that affect us. The Operations Manager works very closely with the Labour Department, Fire Services Department and attempts to influence them in legislation and safety regulations."

[Turning to an environmental factor of the early 1980's, how were you affected by the global recession?]

"We are more protected from recession than other companies because we are multi-disciplinary, multi-market, so it is unlikely that all these markets would be in decline at the same time. It has been evident through the recession that although the broad area of our industrial market was in decline, our medical health-care market was growing very strongly, so we had this counter-balancing effect. This broad span of product in the market does allow us to a degree to influence our destiny a bit too, since we can determine which areas to put emphasis on, increase effort into and put in capital. So we can look at the broad

portfolio and say it is quite evident in the next couple of years that that area is going to be suffering and we can't influence changing world trends, so we will have to live with it. We would pull back our costs in that area and re-direct our efforts in another area. In this sense we are recession-proof. We have the opportunity to do that."

[Does the geographical fact of five million people here in a landlocked situation have a special environmental influence for you?]

"Yes it does. We are a company that has to distribute quite bulky products, which are expensive to deliver. Much of the way we are organized, how many sites we have, the size of those sites and the organization structure, are dependent on the nature of our product and the market. If you compare our size of operation here with, say, a similar one in Australia, you would find that there they would have many more depots servicing a very wide and sparsely-populated rural area and much less concentration on to a central point. Although the organization structure would reflect this, more autonomy would be given to the centre there. The fact that we have not got a large market, where five million people are concentrated into a small geographical area, has had a very significant effect historically on us here."

[Are there any other special features of operating in this territory?]

"A most significant factor that affects us in the gas products area is the location of industry in a multi-storey setting here. We have so many customers who are operating in high rise premises that it creates a whole set of problems of gas supply to them. When it comes to our supplying liquid, there may simply be nowhere to put a storage tank.

We may have to put extra people on our trucks, because in the case of no parking facilities someone has to drive the trucks around the block whilst someone else carries a cylinder up ten stories. All this means that in distribution our operation has to carry additional people and we have a whole set of different problems because of the environment here."

Finance Manager

"This year has been especially competitive and you can say it is mainly the environment that affects our financial position. We are affected in the credit control of cylinders, security and, in some way, our data sources since the source of information is largely the competition. Do you also mean the financial environment?"

[Yes. Any economic, social or political factor outside your walls that affects what you do.]

"Apart from the market environment, we have to be very cautious on the financial side with high interest rates about our stock levels and debtor levels. Without proper control we would have to borrow much more than could be justified and in these days of high interest rates we cannot be too careful. We are also affected by the rates of foreign currency (we turn over about \$13 million a year in US dollars, pounds sterling and french francs)."

[Do these external influences vary a lot?]

"Oh yes, they vary a lot. You know last September the question of foreign currency exchange rates kept me awake at nights, with the local currency running at nine to the US dollar and our outstanding debts

to be paid in US currency. From a financial point of view, government regulations here do not affect us greatly."

[Do you have much competition?]

"In some quarters, yes. We are fighting hard to retain our market share. Once you have competition you are dealing with the customer in controlling cylinders and credit limits, where you have to be very careful as we don't want to upset him. On the other hand you have to get back your debt and ask them to pay within a reasonable time. We have taken quite a time to get used to the new environment. For twenty years we were on our own here and it is only in the last three or four years that we have had any competition. You can imagine if one has been doing things a particular way for that period of time it has to be changed almost overnight. This competition is in the area of gases."

[What proportion of turnover do your competitors have compared to you?]

"I don't have the exact figure. In some cases the effect is psychological because you don't want a competitor to have a very solid standpoint so that he can expand. That is what's important. It is not the absolute percentage of market share that is lost at this point, but the implications for the future. Once you let a competitor get a foot in the door you will gradually lose more. But if you can confine them to a certain area and restrict them there, then you can still dominate the market."

General Marketing Manager

[What most impresses you about the environmental factors affecting your organization?]

"I think today I must say China, that is the one big factor. It affects the company - and any company in this territory - in two ways. Firstly what happens inside China has a direct impact on the future of this place, whether China is stable domestically or unstable and whether they proceed with the implementation of their present plan of development or not. Whatever happens in China, the Chinese have a saying that if the water upstream is muddy, then the water downstream is muddy too. That is the major impact: China controls our destiny here. Secondly, China itself represents a commercial environment and outlet for us now and so constitutes a major opportunity for all sectors of the economy here; so that must be a major factor. Investment takes many forms, joint venture is one of them. Then there are exchanges of people; and especially we need to exchange technology."

[What about the general economic environment?]

"Ours is a service business to industry, so we are greatly influenced by the general activity of industry. Having said that, we have a very broad market base so in that sense we are somewhat insulated against the big fluctuations that can happen in one or two industries in this place quite often. But overall industry activity certainly dictates how well we can do."

[It appears that your turnover and profits have grown steadily in recent times, so have you really been affected by the recession in the last year or two?]

"The whole of the territory here was not badly affected. We never really had a recession, we simply had slow growth. That reflects in

our business. We have several ways of influencing our environment. For instance, there are certain areas even in a slow growth situation that grow faster than others - things like health care activities and social activities that never really slow down here. We can introduce new gas applications and so on, so there are certain things we can do to reduce the impact on us of slow growth in the outside environment."

[You don't export gases to other countries?]

"To very few. Gases are a bit like perfume: the product is very cheap, but the packaging is very expensive. The price that we demand for the product normally cannot bear long transportation and that is the reason why most gas industries are domestic industries."

[Is the climate for doing business here more or less favourable than in other countries in South-East Asia?]

"From a businessman's point of view, I think this is still a favourable place to operate in compared with other places in the region since it is less regulated and still has a lower corporate and personal tax base."

Operations Manager

[How do you relate to the environments which you experience in this organization?]

"We relate closely to our various environments, feeling the effects of them very significantly. I think that we are basically the slave to our environments rather than the creator of them, but that then is the nature of our business. We are servicing a district, we are not pioneering: we are entrepreneurs, very much like a utility company, but

not creating markets. We feel the effect of our environments at all levels, especially the environment of this territory. If the local economy is up we can feel it, if it is down we feel that too. We very much feel the world economy too, as the U.S. dollar is important to us in global terms. We feel the effect of the local environment in a literal sense, since if it rains a lot one month we are aware of the ways in which it affects our business. So we are aware of external effects from the very localised to the worldwide economic effects. I don't think we have a great deal of influence over them. We can certainly try to influence the government here, but only in the areas that are immediately relevant to us. We are somewhat alone in this business and hence we don't have a great impact on anyone else."

[You were not able to influence government here in their banning of your trucks going through the cross-harbour tunnel.]

"I don't think we tried very hard. In that sort of area, we do try to influence them in the rules and regulations which govern our industry and I think to a large extent we do. But this is not really having a big influence on the broader aspect of the environment because it only relates to us and does not infringe on other industries or other people here."

[How do you see your competition?]

"We take it very seriously. It changes our outlook, we have to react to the situation. There are two competitors who take up 10-15 per cent of our business: it is difficult to be precise because in certain areas of our business they don't exist, but they do in gases. In other areas,

such as equipment and the medical side we have always had very strong competitors. Gases represent about 75 per cent of our total business and now we have competition. The market that they go for is in compressed gases, which is the oxygen cylinder business for cutting work. Between them they have about 20 per cent of that business. We regard that as quite important and do not intend to let them have more than 20 per cent. They are always knocking on the door in other areas of production, so they do affect our thinking over product lines even though overall they may not have achieved a great market share."

[You are a fairly consistent volume producer. Would you say, therefore, that you are reactive to market environment?]

"Yes, we react to the market environment and I think we have found it can affect us sharply. Since 1979 the overall market has dipped a little, our holdings quite a lot. However, in some areas we are beginning to see upturns, but not across the board. The recession here was related to that in the world, although it appeared here rather later than in Europe and the United States. We seemed to maintain a momentum sometime after these places before entering the recession, but then we entered it and for a time things here went down with it. It is quite normal for a service industry to do that. We can identify it more closely than that because we can relate our production to consumer goods such as electronics, or our products relate to totally different markets such as the construction industry or the property market."

[An important environment in your business is the technological one. With a somewhat isolated position here, are you able to keep abreast of

technical matters in design, supply and usage?]

"Oh yes. Of course it varies tremendously. In some areas we are further ahead of Europe, possibly because our customers are marketing staff. If you take the semi-conductor business, our customers are lagging slightly behind the United States and Japan, but we are ahead of Europe or at least on a level with them, so we have to move with them. In other areas of technology much will depend on the investment and how recent it was. In other words, we are very aware of the latest technology in a particular field, but until we reach a level at which we can justify a new investment we have to live with the level of technology that we have. It does not mean that the product is necessarily inferior to the new product, We can always get the latest product if we really need it."

[How would you describe the group research activity which supports you since you have no comparable activity here?]

"If you study the research and development activity in the group at large you will find that with few exceptions it is marketing-orientated. This is different from twenty years ago when it was very much process or production-orientated. There are still certain elements in our group which press for basic physical research, but today's direction is towards the application of our products, the use of our equipment, and the quality and type of product to match market demands."

[What about your context as part of Asia?]

" Basically we export very little, so we can more or less neglect that. But the China market is different: we have to consider all the work we

are doing with China, selling and producing. We are now manufacturing on a joint venture basis in our neighbouring province in China. Then there is the question of a dozen or so years when we are due to be absorbed into China as a special economic zone, which presents us with an extraordinary environmental factor. It is not a question of being pulled into a very large market. It would be wrong to think that we will be servicing the whole of China, but I think the best way of putting it is that we are expanding our geographical limits."

Distribution Manager

"From my point of view the most important factor that affects us is the legal environment. In this territory, especially in distribution, we are subject to two sets of regulations. The first is the set of regulations relating to the carrying and storage of dangerous goods, which comes under the Fire Services Department. The other set of regulations we have to comply with are those concerned with road transport under the Transport Department. These two sets of regulations are very strict as far as Asian and even world standards are concerned. They affect our operation compared to many other organizations in that they make it more difficult for us to operate efficiently."

[Your environment also supplies your employees.]

"On the labour supply side, ever since I have been here we have had no difficulty in getting people for distribution. In fact, we have not been taking on many new people for some years and have been trying to cut down on the distribution side."

[How do changes in the local economy affect you?]

"We are actually the first ones to feel the pressure of the economy - not sales - because we are the people in daily and direct contact with the customer; so whenever there is any move in the economy we are the first to know, rather than the service people. They only know when service goes up or down at the end of the month when a report is to hand, but we know it immediately. It could be that last week we were transporting fewer cylinders, that the customer has something wrong with the plant or that he is cutting production and so taking less gas. The most up-do-date information is supplied to service department by us. In a sense we are the salesmen rather than the transport worker."

[Are there any special features of the physical environment here that affect you?]

"Yes, I think what affects us most - and is quite unique in this territory - is the large number of high-rise factory buildings. It is really tough for our delivery people when they have to move the goods up and down twenty stories, waiting for cargo lifts, parking, narrow streets, and all sorts of traffic restrictions. This place is unique in the world: we are quite restricted in our physical environment."

[There is a legal restriction on transporting your products through tunnels for fear of explosions.]

"Yes, our goods are banned from using the several tunnels which are key arteries here, even when the vehicles are not carrying goods in them. And the legal restriction also require that we carry one more person in the truck than we requirie when carrying potentially danger-

ous goods. We are in the process of lobbying government to change the law on this. You should distinguish between cylinder and liquid transport, and in the case of the latter we are carrying double the number we need; so we are applying to the government for exemption."

[What is the justification for two men in the truck?]

"The thinking behind it is that, in the case of an accident, one can look after the vehicle and the other can go and get help. But it really is not the best solution when one man is used for communication purposes only. We are arguing that in the case of a serious accident it makes no difference whether there are one or two men since they can do nothing. For communication purposes our radio communication system is far better than the extra man running around looking for a telephone."

[The connection with China is a special part of your external relations.

Does it have implications for you in distribution?]

"Not greatly at the moment. A few years ago we used to supply carbon dioxide gas to the neighbouring province to us, but we stopped it a year ago. At the moment we don't have any transport activity on the other side of the border. If a joint venture company is set up in that part of China, the company would ordinarily have its own transport facilities. It depends on the need: sometimes we might transport to them or vice-versa, it is quite common in the gas business. To quote an example, our Singapore and Malaysian associate companies work closely together. At the moment the Malaysian side of business is so good that they cannot get enough product from their plant, so the Singapore company is transporting the raw product into Malaysia. It could be

the other way around: when you are in the same group it is quite common."

Sales Manager

"By far the most important aspect of our environment is the economic. Taken overall, I suppose the ups and down in the market are minimal, but there are distinguishable variations by product. During the recession our output gradually increased, although the size of growth was smaller than we would have ordinarily expected. This was true for pretty well all gas companies, where small organizations tend to predominate. Changes in sales volumes during this period affected our smaller customers more than the larger."

[What other environmental changes have affected you?]

"Apart from the economy, there are of course our two competitors who have something like in 17 per cent market penetration in compressed oxygen and acetylene. There is much more competition in the equipment to handle our gases: we go for the high-quality, highly-priced hardware. On the marketing front, we have by no means followed the ideas put forward by our European parent organizations. For example, we only have one sub-depot for customers to collect from, and you will gather from this that we deliver the vast bulk of our production."

Personnel Manager

"Looking at our environmental influences from the personnel point of view, I suppose the first thing that strikes me is that we do not have much difficulty in finding labour. Most of our workers have already worked for us for a long time. Our people are mainly semi-skilled and

have proved to be consistent employees, except at odd times such as in a boom in the construction industry or three years ago when we had some labour trouble. There are certain problems in finding technical and engineering people. You have to recognise the factors affecting this, such as our situation quite a way out of town with transport not so convenient. Also ours is a very specialized industry and I think that engineering and technical people don't believe that experience here can be usefully applied to another industry, so that causes certain problems for us."

[So when times are tough, you do not find difficulty in obtaining labour generally, except for the categories you mentioned.]

"No, it is not difficult. Our workers enjoy comparatively good salaries and better-than-average fringe benefits: we make sure that we are ahead of most companies in the territory. On the staff side I have to admit that we are not directly comparable to the bigger companies in terms of salaries and benefits."

[Do you think that you provide a stable environment for your employees?]

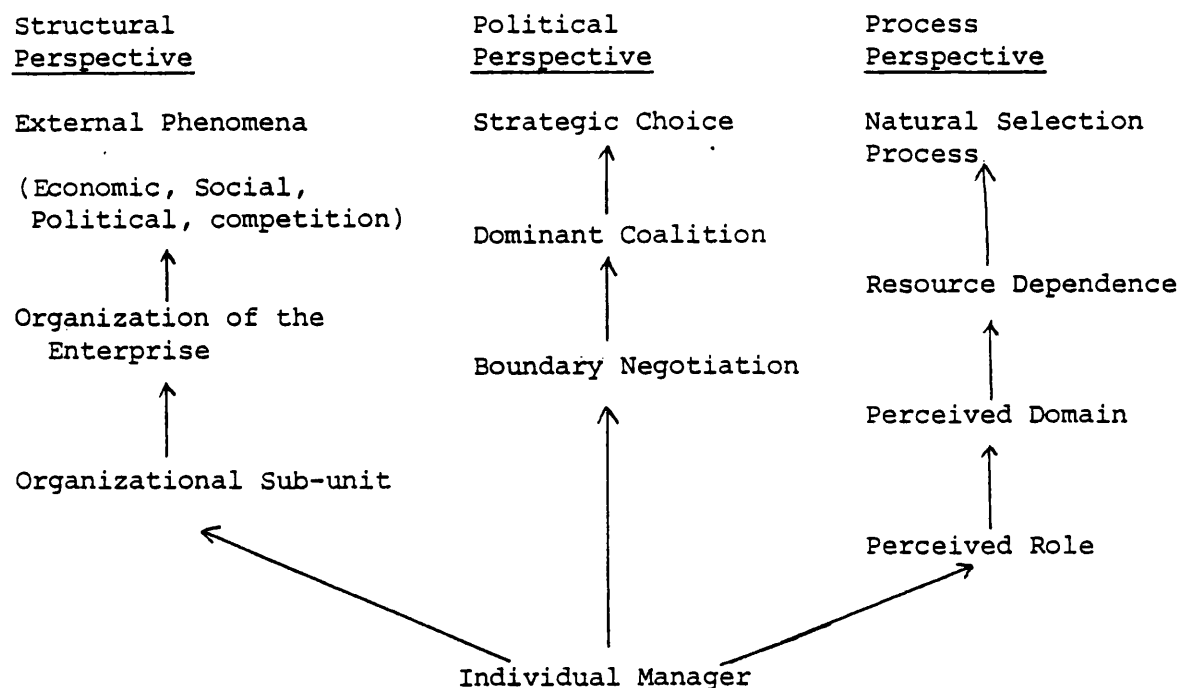
"I believe that we provide a very stable environment for them: most of them stay here until they retire, the labour turnover rate is approaching zero. The staff side is somewhat different. On average they have a higher turnover rate compared to labour, especially amongst the lower-ranking people. These juniors find that they can learn a lot here because of the company size. However, they see that they have limited chances of promotion in the organization because so few new posts become vacant; so there is a natural turnover amongst the younger staff."

Perceptions Perceived

The descriptions of the various forms of organizational environment emanating from the seven principal actors may be viewed as different perspectives. As the most senior managers in the organization, they would be expected to represent their environments as tunnels of their own specialist managerial activity, with the Managing Director taking the most comprehensive view. We may call this the Structural Perspective since it must closely relate to the formal sub-units in which the majority of people find themselves in organizations. At the same time the writer was acutely aware of entering into a political experience in conducting the interviews. The managers were confronted with a person outside any of their ordinarily-defined environments, who could be thought of as anything from a disinterested researcher in the social sciences to someone planted by senior management to find out what was going on at the grass roots. The latter conclusion was not true, notwithstanding the fact that permission to conduct the research had been granted by the most senior directors of the parent company in Europe. Altogether, it was difficult to avoid the experience of being immersed in this second dimension, which we will call the Political Perspective or the "meaning behind meanings", and the seemingly unavoidable lubricant to the activity of all people in working groups. The third major area of involvement was the arena of action itself where there was interaction with the different environments. It became apparent that a great deal of what went on here was conditioned by the manager's perception of his or her role within the domain or territory

which was claimed. Through a series of internal decisions, the Process Perspective was a major path by which the interaction between the organization and its environments came into effect. Conventionally, environments are regarded as states which exist external to the organization. However, the view developed through the process perspective is that environments can have an identity within the organization through the aggregated roles and domains perceived by key personnel and through the network of decisions that recognizes that no organization is sufficient into itself and is to a degree in a state of resource dependence. It will also be argued that the process perspective comes out in the form of an ecological or natural selection model which is analogous to the biological process.

The interaction between the organization and its environments were seen as being advanced through the three major perspectives in the following form:



The structural Perspective represents in organizational terms the hardware by which interaction takes place. It is tempting to see the structural units as the essence of organizational/environmental relations, but in truth they are the framework for the organization's formal encounters with its environments. The formulation of the organization structure and its sub-units, as well as its alteration from time to time, should be primarily focussed upon the achievement of the goals and objectives of the organization (commonly referred to as the task environment). The very formality of organization structure may be challenged in practice by the principal actors in their dealings with the environment, which is why the alternative perspectives include the negotiation of boundaries and perceived domain as less formal alternatives. In the interview carried out with the Operations Manager of Oriental Gas Products, it was clear that her discussion of environments took on a much broader view of her responsibilities, embracing the marketing of various products and an overall perspective that would have done justice to the Managing Director. The structural perspective comes into its own in the identification of forces outside the organization which promote interaction, notably the market for products in the case of a business enterprise and the social, economic and governmental forces which affect the way that an organization conducts itself. To the extent that an individual manager is identified with the sub-unit which he or she is responsible for in a formal sense, the structural perspective provides us with a meaningful vehicle for defining a great deal of the basis of the exchange process which the or-

ganization goes through with its environments.

The political Perspective is a channel of definition which is advanced on the perception that the relatively static, structural components in an organization are an insufficient basis on their own for describing the way an organization works with and through its environments. As the name suggests, this process is to do with the governance of the enterprise, but brings into account the important areas of negotiation of boundaries and the strategic choices which confront managers which are distinctly "political" in character and are the necessary extension of the structural perspective. Schematically in our model this perspective is placed between the structural and the process or, as it could be put, between the prescription and the working reality of interaction with the environment.

A discussion of boundaries brings us to the heartland of organizations and their environments. Child (1969, 1972) and Thompson (1962) have argued that organizations and their environments are not separate and that the boundary between them is partially an arbitrary invention of the perceiver. Starbuck (1976) advanced his perception of organizational boundaries in a particularly colourful allegory:

"An organization displays some of the properties of a cloud or magnetic field. When one is far enough inside it, he can see its characteristics and effects all about him; and when one is far enough inside it, he can see that it comprises a distinctive section of social space. But as he approaches the boundary, the boundary fades into ambiguity and becomes only a region of gradual transition that extends

from the organization's central core far out into the surrounding space. One can sometimes say "Now I am inside" or "Now I am outside", but he can never confidently say "This is the boundary".

Boundaries, like organizations themselves, cannot easily be identified by the presence of a single phenomenon: they imply the conjunction of several related but imperfectly correlated phenomena. Organizational components, such as departments, may appear to be central as measured by some phenomena (or in the minds of people who manage them) or peripheral when measured by other phenomena. If such absolutes are in question, we should not wonder that the boundaries which lie between the component and the interacting environment have to be negotiated. The purpose of the boundaries, as defined by Leifer and Delbecq (1978) are (a) the demarcation at the organization/environment interface; (b) a protection mechanism excluding environmental stresses; and (c) regulators of the flow of information and material between the organization and the environment. Most boundaries will be susceptible to influence from both flanks: from external influences which come from systems either within or without the organization and internally from the efforts at boundary negotiation by key personnel, invariably managerial, who perceive that this is a necessary link in their political perspective.

The implication of the argument thus far in the political perspective is that individual managers or people in responsibility are negotiating environmental boundaries, which is a necessary step in refinement of what may be ordinarily apparent in the structural perspec-

tive. In doing so, the principal actors do not always act on their own, and it is not uncommon for key personnel to look around for others of like intention with whom to combine in the furtherance of their own interests and/or those of the organizational sub-unit for which they have responsibility. Such an alliance of interests may come about for a variety of reasons, such as common work linkages, a similar level of seniority in the organization, temporary or permanent political advantage in the co-operation, or even personal liking. It is at this point that our argument in pursuit of the political perspective becomes most closely linked with those under the heading of "power". Crozier (1964) advanced the idea that a power grouping could emerge from groups of employees who had indispensable technical skills to offer to the organization. The idea being discussed here is a more broadly-based one of a group of key decision-makers who influence policy, its implementation and detail, similar to the concept of the "dominant coalition", formulated by Cyert and March (1963) and employed extensively by Thompson (1967). In Oriental Gas Products the original grouping of such a coalition with the Managing Director contained the Operations Manager, the Finance Manager and the Marketing Manager. The transient nature of such alliances was indicated to the writer over the period of time in association with this organization by further indications that an "inner coalition" developed between the Managing Director and the Operations Manager and by the later emergence (out of the time of enquiry) of the Marketing Manager as the new Managing Director.

The notion of a dominant coalition calls into question

the assertion that organizations are passive recipients of environmental influences or that organizational/environmental relations are necessarily or automatically governed by such structural variables as size and technology. It does not follow that members of the dominant coalition necessarily identify with the formally designated holders of authority in an organization. In the case which we have considered, it referred to those who collectively happened to hold power over a particular period of time and it also happened that those most closely associated were some, but not all, of those with formally designated authority. Being a member of dominant coalition does not always guarantee that a person can succeed in bringing to fruition a course of action. Information about environments has to be provided to the dominant coalition and this may be controlled or even manipulated by other organizational members at the operating levels. Within this political perspective the implementation of decisions may depend on the dominant coalition securing the co-operation of these other parties in the organization so that the quality and timing of information being made available is appropriate.

The final link in the chain of the political perspective which is proffered is the fruit of the decision-making by the dominant coalition, which is the phenomenon of strategic choice. The idea that a caucus of people conspiring to bring their will to bear on the selection of alternative futures for an organization is in itself a challenge to the concept that the organization itself combines to meet the functional imperatives of "systems needs", which somehow transcend the

objectives of any group of organizational members. The functional interpretation that organizations conduct themselves towards a state of "system maintenance" in the face of environmental or contextual constraints has tended to concentrate attention on the outcome of a situation. To lay stress on the strategic choice of a group of people alters the emphasis to the source of a course of action and a necessary focus on the human element which has not always been made in the development of theories on organizations.

One of the earliest references to the exercise of strategic choice by a dominant coalition emerged in the work of Chandler (1962) in an historical study of an American industrial enterprise. According to him (p.13) "Strategy can be defined as the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals. Decisions to expand the volume of activities, to set up distant plants and offices, to move into new economic functions, or become diversified along many lines of business, involve the defining of new basic goals". Chandler's classic statement on the importance of key personnel for the modification of organizational goals was in effect a questioning of the mechanistic view of the forces that carry an organization forward. Later, Burns (1966) was to elaborate that the process of strategy formulation was a constituent of the interplay between what he called the "working organization" and the "political system" within organizations. Child (1972) also developed the theme that the design of organization structure only

has a limited effect on performance levels achieved, a point perceived to be the case by the dominant coalition. In incorporating strategic choice by this group into the perceived coalition. In incorporating strategic choice by this group into the perceived reality of organizational life, one is recognizing the operation of an essentially political process in which organization/environmental relations are affected by the power exercised by decision-makers in the light of their ideological values and recognized opportunities.

It would be false to argue that elements described in the Structural Perspective and the Political Perspective are separate. One emphasises the physical forces and framework of action, whilst the other the human dimensions of power. Therefore the two are intertwined and are complementary. Elements within the structure may be institutionalised to review existing practice and to consider their utility in the light of alternative futures. A possible point of difference may be that the people associated with this process are not necessarily a part of the dominant coalition, and so it is useful to single out the feature of strategic choice if it is not built into the system.

A similar form of intertwining and complementary effect is also evident in the different stages of the Process Perspective, which in many ways is central to the interface between the organization and its environments. As with the other perspectives, we begin with the individual manager and the role which he or she perceives as being appropriate for their position within the organization. We saw contrasts in this respect within Oriental Gas Products with the enlarged percep-

tion of role by the Operations Manager and the somewhat limited perspective shown by the Personnel Manager. These positions may be compared with the role perceived by the Finance Manager that financial criteria were the beginning and end of all activities in the organization. The job description may be the blueprint for the activities of a manager, but the perceived role is by comparison the modified stage on which the actor says his lines. If that stage is larger than the parameters ordinarily established by the job description, it is because additional power has been assumed by the individual, given by the organization, or perhaps even granted by circumstances external to the organization. Although *prima facie* the manager's role may appear to be a purely internal development, the external environments served by the organization are almost certain to condition the role and its inter-relation with the perceived roles of the other principal actors.

Within the Process Perspective the role of key personnel will inextricably become bound up in the specific goals or activities which the organization wishes to pursue and it is this area that is referred to as the perceived domain. This view of domain, which is similar to that elaborated by Levine and White (1961) and Thompson (1967), includes the functions undertaken in order to pursue the goals set. In the case of Oriental Gas Products these functions would include the selection of product lines in medical, industrial gases, together with equipment for the containment and usage of these products, the basic for marketing, selling and distributing, and the acceptable financial criteria for all activities. An alternate emphasis of the term domain

has been utilised by McWhinnie (1968), Normann (1969, 1971) and Child (1972) in describing those aspects of the environment with which the organization constantly interacts or are of concern. There is no conflict between this emphasis and that employed earlier, since they are as if different sides to a piece of glass in the same situation. This effect was referred to earlier as a form of inter-twining and has a close affinity to the process of boundary negotiation under the Political Perspective and the function of the organizational sub-unit under the Structural Perspective.

As the manager moves closer to his or her external environment the point is reached when decisions have to be taken by the individual or in concert with others. This is the point in the Process Perspective where the organization recognises that it is not able internally to generate all the resources or functions to maintain itself, and therefore it must enter into transactions and relations with elements in the environment. It is this link in the chain that is called resource dependence in the model put forward. Managers take decisions according to the range of choices or strategies decided upon, which affect not only the environments but also internal arrangements which are appropriately related. A perennial strategy is the survival of the organization. However, the emphasis may be modified to embrace expansion, diversification, holding the line or to disadvantage competitive organizations. Strategic choice is also a part of this process. The essence of economic dependence is that there is an area for positive managerial intervention with environments which recognises that the organization is not necessarily a puppet of environmental

forces and that there is a place for critical action which can create, fashion or negate outside pressures.

Resource dependence with its emphasis on internal decision-making by key personnel is, despite its interaction with environments, essentially micro in its focus. It does not throw light necessarily on the broader, macro situation, such as the reasons why organizations came into being in the first place, how they can be forced out of existence or, between the two, the effect which one or combination of the environments may have in conditioning what an organization does. Drawn from an analogy in the biological sciences, this approach is most aptly described as a process of natural selection. Described in detail in Chapter 7 through its stages of variation, selection and retention, this final part of the Process Perspective is necessary to incorporate in some form if one concludes that organizations are not always masters of their own destinies. Aldrich and Pfeffer (1976) found that the nature selection approach was "not entirely incompatible" with that of resource dependence depending on which level of analysis was being addressed, time frame being used, and sources of variation, selection and retention.

The natural selection approach is most clearly applied at the population level of analysis, in the same way as it is found in biological research in the evolution of species. Oriental Gas Products came into existence because there was a market demand for industrial and medical gases in the growing city-state on the edge of China, and this need was both perceived and met by the Franco-British companies

which made the initial investment. The adjustments which it made over the years in structure, personnel, product line and mode of distribution were a furtherance of this natural selection or ecological process, whereby the organization contained to demonstrate that it fitted environmental requirements. The organization flourished, made a steady profit and did not call upon the sponsoring parent companies for further contribution, thus justifying the initial ecological initiatives of variation through market demand, selection of the appropriate technology, market and organizational framework and retention of those elements which were most suitable to the achievement of organizational goals. In the case of this organization the environment did make a variation in the five years prior to the enquiry with the emergence of two competitors in this territory accounting for some 15% of the market in industrial gases. This development, together with the impact of economic recession in the early 1980's, had some effect on this organization, but together were not strong enough to throw it off course from the gradual attainment of its objectives.

Although the natural selection process is put forward as the final sequence in the Process Perspective from a manager's point of view, from the organization's point of view it is the original process by which the environments are able to identify and licence the very existence of the organization. In that sense it is not truly a beginning or an end, but an all-pervasive factor which creates the conditions under which opportunities may be considered and adjustments made once the organization has its being. A simultaneous presence is also

in evidence between the process of natural selection, with its emphasis on the survival of the fittest, and resource dependence, which recognises the ability of managers to take critical decisions and fashion their future.

A Personal Perspective on Environments.

As the person with research interests coming from outside this organization, I found myself in the unusual position of being a minor representative of the environmental dimension which was under discussion. Traditionally the focus of the attention has been upon those arrangements which are made within the organization to deal with the interaction at the frontier with one of a number of environments; or occasionally, the impact that initiatives from the organization may make on their environments. Prior to encountering the organization, my anticipation of the kind of environmental influences which would be relevant to a manufacturing and business concern such as this was that they would be largely economic (as a barometer of the world in which they were doing business), marketing (concern for competition and the problems of distributing the product), and social (mainly the supply of labour of the right quality for the task at hand). There was some evidence that the managers responded to their environments through the particular rules of conduct that the specialized nature of their work dictated. My impression was that environmental interaction did more than the discussions on power and control to unite organizational members in their reaction to this dimension. From an organizational standpoint, the environment constituted a force from outside which, if it was superior, had an effect on all members, and I saw this as the most important element in binding together the managers in their

reaction to it. The special quality of external conditions, threats, and opportunities is that they remind people in positions of authority that their joint survival and future prosperity in a business organization depend on these outside factors which, despite the differences between individual members, bind them together in a way which is not matched by the other dimensions which we have examined.

The main reaction to environmental influences embraced the economic (particularly competition and the policy on credit), legal (special regulations affecting the carrying of their products in areas deemed to be dangerous in transport) and social (largely the availability of suitable categories of employees in the area). The impression which came through most strongly to me as the observer was that a process of Natural Selection was going on in the way that environments affected Oriental Gas Products. Especially in the environment of business, I had the feeling that the point and counterpoint of initiatives, in a situation where commercial considerations were uppermost, were in themselves the most important general condition affecting the organization. A broader argument could be developed that the origin, sustaining and possible demise of all business organizations are governed by this version of the principle of the survival of the fittest. This is most obviously the case with the environments created by conventional capitalist economies, but it may be questionable with certain state-run (often monopolistic) enterprises where inefficiency might be covered up and the concern is bolstered up by subsidies to ensure that the organization continues at all costs.

In our examination so far of the domains of power, control, and

environmental influence, it is not always easy to draw parallels between the three, except in the circumstances in which the degree of power held by an individual conditions the type of control which is instituted. If we look in parallel at environmental influences, the impression which I formulated out of the interviews with the managers is that as a dimension the environments are less susceptible than power and control to the impact of individual personalities and the interaction between people. By their very nature environments are phenomena created by the multiple or even mass contributions of numbers of people. Individuals have to hold enormous sway - in the manner of Napoleon, Stalin, Hitler or Mao Tse-tung - for it to be said that they on their own create and sustain environments which have an impact on organizations across societies. In the case of Oriental Gas Products the environments were created by mass forces, and one of the logical effects of this upon the organization was that the company tended towards the cohesive in its response to this area of activity. Even the Managing Director did not lay claim to an ability to handle environmental interaction single-handedly.

The evidence from the fieldwork in the area of environmental influence pointed to a substantial gap between the perceptions of the managers and the concepts which have emerged in the literature. In the eyes of the managers the environments were simple and readily identifiable symbols that they had to deal with in order to help the organization survive and prosper. Each of the managers pointed to aspects which reflected the specialized nature of the work which he or she was undertaking. Only the Managing Director came close to a definition of the more complex global nature of the challenges which

environments present. The essence of the interpretations, therefore, was a mirror of what happens in the daily lives of managers, that opportunities and threats are perceived, crises are confronted, and the need for constant transaction at different levels with the various environments which is always there. The centrality of the environmental challenge is important to many organizations, and Oriental Gas Products displayed a typically robust reaction of an organization which is in a strong market position (for many years in a monopoly for its products) and which is financially successful.

The clear-cut, uncomplicated responses of the managers of this organization to the issue stand out in stark contrast to the more fanciful attempts to classify environments by writers in the field, including myself. It is in the nature of sociologists and economists to take a point of ordinary contact between an individual or the organization and one of the environments and to translate this relationship into a much grander definition which purports to embrace similar situations in the broader universe. The points emerging from the fieldwork suggest a straightforward set of initiatives and responses by individuals and organizations to the need to establish and perpetuate the life of the organization. One is left with the impression that this point is altogether too obvious for the writers, who see themselves as the standard bearers for the definition of "the grand design", of which ordinary human behaviour is but a part. There is a parallel here in the way that certain writers disdain the mundanity of defining an individual manager's idiosyncratic response to a situation unless it can be conveniently slotted into a wider typology, such as the transactional role of the organization (Dill,

1958, 1962), Lawrence and Lorsch (1967), Duncan (1972) and Aldrich and Mindlin (1978), the causal texture of the relationship (Emery and Trist, 1965), contingency and strategic choice (Burns and Stalker, 1961) or a process of Natural Selection (Hawley, 1950, 1969) and Campbell (1969). Each of these conceptual approaches may be relevant to a greater or lesser degree to the situation in Oriental Gas Products. To the managers, however, the response was largely a pragmatic one, almost an instinctive one, to forces "out there", without necessarily having the time to dress up the situation in a broader classification. The difference in approach to environmental issues between managers and writers is, in the final analysis, not very surprising since they come into the same problem from different angles. Writers are prone to articulate around situations that can be classified without having to account for winning the battle: managers are required to fight, often in a make-or-break situation.

THE ELUSIVE VARIABLE OF CULTURE

Multi-national organizations such as Oriental Gas Products appear to be at the centre of a paradox. On the one hand they portray many of the characteristics which are present in businesses all over the world, particularly in technology and the systems of work which they use. Indeed a standardization of practice between organizations operating in different countries is a principle most dearly adhered to by many multi-nationals. On the other hand, parent organizations are the product of distinctive cultures, as too are the subsidiaries which they produce throughout the world. We must therefore consider whether these organizations are immune from the cultural effects of the societies in which they are located, especially in the behaviour patterns of those who hold power to control affairs and their cognition.

Historically in the development of thought about organization what might be termed the culture-free or universal approach seems to have taken an early root. Even the critics of the Weberian ideal-type of bureaucracy, or the views advanced by Taylor (1911) or Fayol (1916) did not base their major criticism on the rationalist theory or the universality on which the models were based. These early positions were adopted in the name of the principle that there is no science possible without universality and hence many research studies tried to develop a general theory of organizations posing the existence of rationality above all, stretching beyond national specifics or cultural peculiarities. Lammers (1976) wrote about the "Anglo-Saxon" bias in organizational science:

"It is no accident that this type of research (search for general regularities valid across cultures) is usually called cross-cultural research. In other words, the customary way of dealing with cultural factors is to randomise them, to cross them out."

In an even more telling indictment, Maurice (1979) commented: "..... one may question the theoretical status of the concept of 'universalism', at least as it is being used by the proponents of the culture-free thesis. Postulating from the outset and according to the principle of the null hypothesis the existence of a national (or cultural) effect, they proceed to test it. But then, is one not trapped in Weberian logic of rationality? For the dimensions of the formal structures of the organization (formalization, centralization, specialization, etc.) as well as the relationships between these dimensions and the contextual variables (size, technology, dependence on other organizations, etc.) are based upon concepts (and indicators) to which their very generality gives ipso facto the status of universality, thus undermining the possibility of really testing for the national (or cultural) effect. The constraints of the test of the national effect thus appear to be counteracted by a logic of the rationality of the organization, considered a priori as supranational, therefore universal, but founded actually theoretically upon concepts and model-building, and empirically upon indicators and operational processes that exclude any reference to the structures of the society within which the organization operates."

This statement presents a major challenge to the positivist position which strives to establish the universal tenets which are the features of a scientific discipline. It questions whether organi-

zations can be considered as entities that can easily be analyzed in terms of patterns of regularity and uniformity (Heydebrand, 1973, p. 10), thus consigning national or cultural factors to the status of external data, accounting at best for the residual factors of the model. An attempt to mediate between these views may be seen in the work of Kerr et al (1960). These writers argue that there is a logic of industrialism, generating imperatives of an economic and technological nature, which is steadily moulding the development of industrial societies into a common pattern. It was accepted that whilst there were diverse political, ideological and cultural origins in these societies, their institutional frameworks were nevertheless converging under the force of a common industrial logic. This view, which was also later reflected by Galbraith (1967), adopts the perspective that cultural factors can only act as a brake on the inevitable movement from traditionalism to modernism. An even earlier version of the argument had been advanced by Harbison and Myers (1955), who emphasized that industrialization brings about an increasing specialization of functions within industrial organizations. Enterprises grow in internal complexity and they grow in overall size. Specialization and complexity create problems of co-ordination within organizations. At the same time, growing size and complexity make it increasingly difficult to retain all decision-making at the top of organizational hierarchies. Therefore, they perceived that the logic of industrial development calls for increasing management decentralization as enterprises grow in size and complexity. Appropriate relationships of authority also shift from an authoritarian to a more constitutionally

formalized and participative mode along with decentralization, with the employment of specialist experts and with rising employee expectations. Thus management has to become increasingly based on competence and professionalism. Most relevant of all for the purpose of our discussion, Harbison and Myers argued that the logic of industrialization prevails whatever the cultural setting, though they do recognize that cultural factors can impinge on the process and slow it down. This position was less radical than that adopted by Hickson et al. (1974 p. 63) who stated that "relationships between the structural characteristics of work organizations and variables of organization context will be stable across societies."

The argument so far has been less concerned with the existence of culture and more with its relative role in organizational analysis. Anthropologists have traditionally been the principal custodians of the notion that organizations, like any other major phenomenon in a society, are culture-bound. The argument is advanced that different societies exhibit distinct and relatively persistent cultures, which are seen as widely shared patterns of thought and manners. Relatively enduring strains of culture are perpetuated as each new generation passes through its process of socialization. People learn their own unique language, concepts and system of values, and they also learn to regard as legitimate particular modes of behaviour. It is therefore argued that even if societies in different societies are confronted with similar contingencies and, on the surface, adopt similar models of structure, strong cultural forces will still assert themselves in the way people behave and relate to one another.

Culture has been defined in a variety of ways. Kluckholm (1951) used a consensus of anthropological ideas in his definition: "Culture consists in patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups, including their embodiment in artifacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values".

A difficulty which is apparent in definitions of culture is the distinction between the emphasis on the group or the individual. Triandis (1972) distinguishes "subjective" culture from its expression in "objective" artifacts and defines the former as "a cultural group's characteristic way of perceiving the man-made part of its environment". Hofstede (1980) treats culture as "the collective programming of the mind which distinguishes the members of one human group from another", further drawing the distinction that "..... culture determines the identity of a human group in the same way as personality determines the identity of an individual". We see the tendency to reserve the word "culture" for societies, for ethnic or regional groups, but equally being applied to other human categories such as an organization, a profession or a family. Does this mean that the individual is an irrelevant or inappropriate symbol for portraying cultural effects? If we do not accept this, it follows that there is something of a dilemma in trying to define the culture of an organization wherein the principal actors who wield power and control, and who interact with the environment, may be the product of widely-differing cultural backgrounds, except in portraying that of the country where the multi-national subsidiary is located. Taken in this perspective, a photograph or precise

measurement of cultural effect is an impossible ideal.

Reviewing 526 publications in the field of cross-cultural studies in organizational behaviour until the end of the decade of the 1960's, Roberts (1970) proclaimed the research to be "a morass". Generally, the work reviewed represented two traditions, but manifested very little communication between the two groups. One group of writers was interested in the effect of "culture" on individual attitudes or behaviour in organizations, based on what might be termed micro data. In the event that this group extended their interest into macro variables, such as the characteristics of whole organizations, they tended to aggregate individual measures to obtain organizational measures. The other group was preoccupied with the effect of "culture" on organizational, structural, environmental and transactional variables. Data, if drawn at all, were from sources such as summaries of organizational, production or national economic statistics (macro data). The substantive areas which were covered in these earlier studies included: attitudes and values; attitude change; bibliographies; conflict resolution and ethnocentrism; decision-making and bargaining; economics; education, creativity, and intelligence; efficiency and productivity; international business; inter-personal behaviour; labour; language and communication; leadership in small groups; management and management development; motivation and achievement; national character and stereotypes; occupational prestige; organizational structure; perception; personality; personnel selection and testing; satisfaction; social and technical change; and training for cross-cultural contacts. The largest groups reviewed by Roberts (1970) were located in the areas of management, attitudes and values, and personality. In this kaleidoscope of efforts to define aspects of cultural influence in organizations, positivists in theoretical tradition of organizational

search undoubtedly took this variety for an opportunity to cast the role of culture away from centre stage and consign it to the status of an independent variable: others took it as rich evidence of the diversity of cultural power in any organization.

Prima facie the most obvious approach to cross-cultural research is to take organizations in similar fields and technology, but located in totally differing societies, and to observe the differences. Harbison, Kochling, Cassell and Reubman (1955) did this in respect of steel factories on two continents and came to the conclusion that the difference was caused by the education required at different managerial levels. Can it be asserted that this difference is culturally caused? Is the question of differential managerial education across cultures the right question to ask? As we move into the minefield of causality it is only the brave who will continue to assert that a diagnostic and ultimately a prescriptive formula has been discovered: it is safer to retreat to the ground where pictures of experience are painted and the actions of the actors, together with the agenda which they set are examined for the richness they offer.

Taken alone, research into attitudes and beliefs is the most commonly reported on in the broad field of social psychology. This has tended to taken on one of two forms:

- the description of attitudes of managers in one country, concentrating on people of that distinctive ethnic background
- the establishment of large cross-cultural descriptions of managerial motives and attitudes towards leadership and managerial role in a number of countries.

In the first of these categories some of the more interesting studies

have been carried out on managers of a single ethnic background in Japan (Abegglen, 1958; Dore, 1973), India (McClelland and Winter, 1969), Australia (Clark and McCabe, 1970), Italy (Simonetti, 1973, 1974), Greece (Cummings and Schmidt, 1972), Germany (Hartman, 1959), the Soviet Union (Granick, 1960; Richman, 1965, 1967), the Lebanon (Yusif, 1962), and Argentina (Cochran and Reina, 1962). Hardly ethnocentric, but carried out on similar lines, have been regional studies carried out on managers in Europe (Granick, 1962), Latin America (Lauterbach, 1966), and Africa (Geiger and Armstrong, 1964).

Some of the early studies in the second grouping of approaches to cross-cultural factors in management took as their theme the incorporation of social and economic factors into the analysis of managerial activity. Harbison and Myers (1959), referred to earlier, illustrate the choice in emphasis that lies before the researcher in whether to allow the national data to speak for themselves or to see culture as a brake of varying magnitude on broader socio-economic forces which could be said to have a global effect. Harbison and Myers chose the latter path. In looking at managerial tasks and the managers themselves in twelve countries, they developed a threefold typology:

- a) Managers as an Economic Resource, seen from the standpoint of operating in simple or complex operations, involving the investment of capital and managerial resources in relation to one or a number of markets. In this respect managers play a key role in creating opportunities for innovation, increased productivity and organizational efficiency.
- b) Managers as a System of Authority. The underlying model postulates a number of stages along the developmental path which leads a society from the agrarian/feudalistic system to an industrial/demo-

cratic state. Depending on the stage of development of a country, managers may adopt a variety of philosophies towards their work - authoritarian, paternalistic, constitutional or participative.

- c) Management as a Class or Elite. This perspective emphasizes who gets into the management class, by what means, and what is management's relative prestige as well as power in a given society. In this respect, management is seen as patrimonial, political or professional.

Having developed these criteria, Harbison and Myers go on to describe and analyze management operating in twelve countries. The results of these studies broadly confirm their hypothesis that the relative level of economic activity and achievement is a function of socio-economic conditions which manifest themselves in the relative intensity of management utilization, the peculiarities of acquisition, the exercise and maintenance of managerial authority, and management's relative prestige and power in society.

Whilst acknowledging the contribution of Harbison and Myers to the building of an economic and social framework for looking at comparative management, Schollhammer (1969) pointed out a number of disadvantages. He found that the approach was frequently ambiguous, not lending itself to the formulations of predictions or at least of normative statements. It was evident from the analyses of three of the countries - the United Kingdom, France and Germany - that whereas substantial differences were observable from a sociological perspective, no clear distinctions could be drawn from the impact of differences from an economic point of view. It also appears from their work that insufficient attention was paid through the socio-economic approach to individual differences in managerial behaviour and to interfirm comparisons in a given society. The strong macro-orientation and

limited focus of Harbison and Myers' work does not, however, detract from the major step forward that it took in attempting to set a theoretical framework in which managers from different countries could be examined.

Another macro-approach to the question of model building in comparative management is exemplified in the work of Farmer and Richman (1964, 1965). The underlying assumption to their work was that economic development results from the "economic efficiency" of firms, which in turn is a function of "managerial effectiveness". They stressed that economic and managerial performance are constrained by a large number of environmental factors which are identified under four major headings:

- Educational Characteristics: including the level of literacy, higher education, specialized technical training, attitudes towards education, and the educational match with requirements.
- Sociological Characteristics: the view of managers as an elite group, of wealth, of rational risk-taking, of achievement, and of class flexibility.
- Political and Legal Characteristics: legal regulations affecting business, defence and foreign policy, political stability, political organization, flexibility of law and legal changes.
- Economic Considerations: the general economic framework, the central banking system, economic stability, fiscal policy, organization of capital markets, factor endowment (the relative supply of capital and land, skills in the work-force), market size, and inter-organizational co-operation.

Farmer and Richman then proposed a matrix with scores up to 100 each for the Educational, Sociological, and Political/Legal factors and 200 for Economic considerations, all with differential sub-scores. Total constraint scores were then added together for each country and compared to the index of Gross National Product per capita and Gross National Product growth in the previous decade. (These factors were weighted 80% for GNP per capita and 10% for GNP growth rate). Although the figures for the four sets of characteristics were based on subjective ratings, the authors saw potential in such an approach for multi-national organizations planning expansion into various countries. As Harbison and Myers had earlier been criticized for ignoring environmental or ecological factors at the expense of a socio-economic definition, so in turn Farmer and Richman were criticized for an over-emphasis on external variables to the complete exclusion of internal organizational variables. Boddewyn (1966) remarked: "A real danger exists.... of letting environment crowd out comparative analysis. One has therefore to exercise great care not to throw out the management baby with the environmental bath or to smother it in a blanket of social context".

The two examples just examined represent approaches to the study of cross-cultural influences on organizations which are characteristic of their age. The approach is similar in both cases to the situation of a photographer flying over a vast terrain taking pictures and classifying the results in socio-economic terms according to broad descriptions which are understood. Others used the ecological approach. Blough (1966) emphasized three sets of environmental factors and their influence on business decisions: governmental policies, cultural characteristics and the stage of economic development. Throughout his

analysis there was an emphasis on the need for a kind of passive, adaptive behaviour on the part of the business organization to the dynamic changing environmental conditions. Whilst Blough considered governmental policies as the major environmental conditioning factor, Hall (1959, 1960) concentrated upon cultural and sociological factors and their impact upon international management. With the continued emphasis on regarding the individual enterprise as basically a passive creature of external "constraints", the writers stressed the necessity for environmental adaptation and paid less heed to the fact that management may choose to act in defiance of certain external conditions and, in doing so, they neglected management's role as a change agent.

In 1965 two studies served to bring the focus of attention away from the environmental, ecological approach to the managerial philosophy of the organization. Negandhi and Estafen (1965) developed a behaviour-orientated framework for classifying managerial activity, which worked on three levels:

- Managerial functions, defined in the traditional sense as those of planning, organizing, staffing, controlling, direction and leadership.
- Managerial effectiveness, expressed in terms of profitability, changes in profits and sales, employee morale and the public image of the company.
- Management philosophy, defined as "the expressed and defined attitude or relationships of a firm with some of its external and internal agents such as consumers, the company's involvement with the community, the company's relationship with local, state and federal governments, the company's attitude and relationship with employees, and the company's re-

lationship with suppliers and distributors".

A notion which is central to this model is that managerial effectiveness is a function of the managerial practices which, in turn, are a function of management's behavioural characteristics which manifest themselves in management philosophies and policies. Schollhammer (1969) criticized the model for being arbitrary and not comprehensive enough. Indeed the model is so patently involved with the internal factors of a closed system that one wonders if the authors had ever set out to define the situation comprehensively, bringing in external environmental considerations which are begging to be brought in as intervening variables.

In a later work, Negandhi and Estafen (1973) corrected the balance by using an open system approach in characterizing the interaction of the organization with its environment. They perceived the organization as being impinged upon by three environmental layers:

- The Organizational Environment, dealing with such variables as size, technology, organizational climate, and the human and capital resources of the firm.
- The Task Environment, including distributors, suppliers, employees, consumers, stockholders, government and community. The authors had conducted studies to throw light on the impact of this environment on organizational patterns and perceived effectiveness in Spain, Chili and Sweden. They tried to show the relationship between the interaction at the boundary and organizational effectiveness as measured by profits and market share.

- The Societal Environment: the macro-environment (economics, political, social, cultural, legal) as identified by Farmer and Richman (1965).

In both of these models Negandhi and Estafen are undoubtedly aware that cultural factors are embedded in the layers of their models, although no special effort is made to single them out as a distinctive phenomenon affecting the organization. In this respect, we are reminded of the immense difficulty in defining cultural effect with any precision: whether we take the narrower view of that which is distinctive to a particular society or the broader approach of a society which retains the distinctive but takes and interprets extra social and environmental forces. The multi-national organization such as Oriental Gas Products represents the embodiment of these various influences. It is somewhat surprising that so little research appears to have been done taking the multi-national organization at the centre stage of the theoretical effort. One such attempt may be seen in the model developed by Perlmutter (1965), further developed by Thorelli (1966), in which the managerial philosophies adopted by multi-nationals could be defined in one of three categories:

- Ethnocentric: a philosophy signifying that corporate management attempts to implement the same values, policies and sentiments of the parent company regardless of environmental differences. It follows that foreign subsidiaries in which management pursue an ethnocentric philosophy have little autonomy. Their operations are regulated according

to the guidelines of the parent company.

- Polycentric: reflecting the management's awareness of environmental differences and their resolve that every foreign operation should be as local in identity as is practicable. Individual companies operate as far as possible in accordance with local norms and environmental conditions.
- Geocentric: a philosophy which is truly cosmopolitan in spirit, leading the company to recognize environmental differences but at the same time prescribing inter-relationships without any pre-conceived notion about the omniscience of either the head office or the foreign subsidiary company.

Maintaining a firmly macro focus, Perlmutter and Thorelli proposed this model to detect the causes of the emergence of any one of the three forms of management philosophy and went as far as to claim that they had an influence on managerial effectiveness and the organizational efficiency of multi-national firms. The authors go on to assert the hypothesis that ethnocentric and polycentric management philosophies are likely to give rise to numerous conflict situations which will be detrimental to managerial effectiveness, whereas a geocentric philosophy will lead to desirable results. It is at this point, when Perlmutter and Thorelli take a small and elegant typology and convert it into a vehicle for prescription, in the face of the highly complex economic, political and social variables that are likely to lead to managerial effectiveness, are likely to lose the support of those who have followed them thus far.

These examples of cultural effect on organizations, taken largely from the period of the 1960's, form a kind of cradle of concern

for what was to be a burgeoning curiosity. Studies tended to be empirical in nature, imbued with the positivist ethic, and in certain cases very large in their population sample. One of these was a comparative study on managerial behaviour, attitudes and satisfactions conducted by Haire, Ghiselli and Porter (1967). Using the questionnaire method, the authors extended their researches to 3641 managers in 14 countries covering a spread of ages, management levels and organizational sizes. Their enquiry focussed on attitudes concerning leadership policies, the managerial role, together with the satisfactions and motivations associated with managerial positions. The main conclusion of the study is that there is a high degree of similarity in managerial behaviour in the various countries but that there also exist substantial national and cultural differences which account for about 28% of the variations in managerial attitudes which the research revealed. A major finding was that despite wide cultural variety there was a consistent tendency towards pessimism about the average subordinate's capacity for initiative and responsible behaviour, combined paradoxically with a consistent tendency to agree that the best method of leadership was the democratic-participative. As Haire et al commented "they want to build a Jeffersonian democracy on a basic belief in the Divine Right of Kings".

Another very large empirical study is contained in a wide-ranging set of case exercises on managerial and organizational psychology developed by Bass (1967, 1972). Each of ten exercises administered was centred on a specific management problem or behavioural issue such as supervision, organizational problems, communication, industrial bargaining, managers' personal life goals, or the job of the manager as a whole rather than on specific instances. The managers involved

in the programme, drawn from different countries, were required to make a personal or group decision on the questions posed. Trained observers were on hand to see how the managers tackled these exercises, what decisions they reached and how, if at all, they modified their decisions. In this way Bass and his associates were able to establish a large-scale, empirically-based data bank on managerial behaviour and attitudes in a variety of cultures. The programme, known as the International Research Groups on Management (IRGOM), encompassed 25 countries in the Americas, Europe, Asia and Africa and, for its day, represented one of the most comprehensive attempts to gather and analyze data about managerial activity across cultures.

It has already been noted in passing that relatively little work appears to have been done by multi-national organizations themselves to look into the questions of work and attitudes in their foreign subsidiary organizations. If such work has been done, there has been little effort to publish the results. However, one of two notable exceptions was evident in a large cross-national study of managers' job attitudes conducted by IBM Corporation (Hinrichs and Ferrario, 1974). They conducted a survey programme amongst 6,366 IBM managers located in 63 countries. Their aims were :

- To identify the extent to which management job attitudes could be classified by age, type of job, the national origin of the manager and the differential effects of these factors evaluated in terms of how they contribute to overall satisfaction, attitudes towards pay, advancement and goals.
- To explore the impact of the country environment on job attitudes, taking as the independent variables a country's

growth rate, affluence and size.

At a later stage the research was extended to embrace up to 90% of the employees in the countries concerned, giving a total sample size of 78,079 people surveyed in IBM subsidiaries in 63 countries over a four year period.

In one other piece of research, Hofstede (1980) demonstrated that his appetite for huge cross-national enquiry within a multi-national organization was uninhibited. Working within one multi-national corporation, he carried out employee attitude surveys amongst some 60,000 employees in the first survey round (1967-71) and from about 55,000 in the second survey (1971-73) the number of respondents was reduced to about half in each case by singling out seven occupational categories for comparative analysis over 39 countries. A special feature of this work was the manner in which the author addressed himself to what were perceived to be differences between countries in the distribution of power by superiors over subordinates in the organization. Hofstede defined the term "power distance" as the difference between the extent to which A can determine the behaviour of B and the extent to which B can determine the behaviour of A. A Power Distance Index (PDI) was established on the basis of answers to three questions: the index was high if:

- a large percentage of the subordinates describe their superiors' decision-making behaviour as either autocratic or paternalistic.
- respondents state that employees are frequently afraid to disagree with their managers.
- subordinates do not prefer a "consultative" decision-making behaviour in their superior (meaning that the superior asks

the subordinates' opinion before taking a decision). Subordinates prefer instead an "autocratic" or "paternalistic" superior or, on the other hand, they prefer a "majority vote" superior, i.e. one who does not decide at all, but governs by letting his subordinates vote.

On the basis of this evidence, Hofstede put together a number of correlations with the social and economic factors which were evident in the countries at that time and attempted to define a number of groupings which were apparent in his data. For example, he defined two basic groupings:

- Countries with a low PDI score of 11-40. These were fifteen wealthy, temperate zone countries from Germanic Europe, North America, and the South Pacific, plus Israel.
- Countries with a high PDI score of 49-94. These were twenty four other countries in Asia, Latin America and in the Latin and Mediterranean part of Europe, plus South Africa and Yugoslavia.

Based upon 1970 data, further correlations were apparent: a low PDI score with wealth, higher-than-average economic growth, distance of the country from the equator and large organization size: a high PDI score with population size, higher-than-average population growth, and high population density. Hofstede's work represents something of a watershed in the type of enquiry into cross-national affairs. As we see from the examples considered, the predominant assumption about the ontological status of social reality is that the enquiry is objective and determinist in spirit. Whilst it could be argued that this approach was dominant in the social science research of the time, it seems likely that the curiosity to conduct research of an individual,

interpretive nature was not stimulated by the sheer multiplicity of countries in which cultural influence manifested itself. Faced with such complexity, and perhaps a reluctance to draw conclusions from huge amounts of data in different settings, it was natural that those of this persuasion should withdraw to consider the richness of their alternative findings.

Towards a Scheme of Ideas

When we endeavour to examine the different approaches, it seems that the one point on which there is universal agreement is that all those who create knowledge about the world do so by drawing out the implications of different metaphorical insights for their subjects of study (Pepper 1942, Kaplan, 1964; Brown, 1977; Morgan, 1980). In an area as rich and as complex as culture, it is restricting to conclude that the various approaches are mutually exclusive. The broader field of organization theory has tended to polarize between metaphors which emphasize the machine aspects and those which emphasize the organism. The imagery of the former suggests a view of organizations as instruments for the accomplishment of tasks, consisting of multiple parts to be designed and meshed into finely-tuned efficiency. The latter, which draws heavily upon systems theory as its source, characterizes organizations as struggling for survival within a changing environment (Trist and Bamforth, 1951; Burns and Stalker, 1961; Lawrence and Lorsch, 1967). Organizations are studied in terms of the way they manage interdependencies and exchanges across systems boundaries. The concept of the organization as an organism would appear to lend itself more closely to the idea of culture than that of the machine.

When we look at the broad picture there seem to be similarities in spirit in the ideas which have been developed to span the organizational and cultural metaphors. Meadows (1967) argued that organization

theory is always rooted in the imagery of order:

"Organization is a function of the problem of order and orderliness; similarly, conceptualizations of social organization have been a function of the conceptualizations of the problem of order and orderliness. Very early in human experience, order seems to have been a kind of inescapable and irretrievable empirical fact. The sun rises and sets; people are born and they die; the seasons come and go; and there is the procession of the stars. The spatial patterning and temporality of man's experience established an imagery of order, forming a backdrop to the drama of cosmos arising out of chaos. In the slow, incremental achievement of a substantial scientific stance with respect to the universe, there had been built into man's semiotic of experience and into his traditional pieties the unquestionable assumption that this is an orderly universe".

Whilst radical and marxist writers might not agree with the emphasis that Meadows places on order and orderliness in social arrangements, the element of predictability and inevitability which is continued in the statement stands very much in parallel with the stated processes of the dialectic - social construction, totality, contradiction and praxis. The concern for the problem of social order which is evident in Meadow's view also reflects the view of orderliness and the patterning of much of our life experience which has been put forward by anthropologists (Benedict, 1934). Such is the basis, therefore, of the study of culture and comparative management which has been most prominent in the literature of approaches described so far. In treating culture as an independent variable which is imported into the organization through its members, this school believes that the presence

of culture is revealed in the pattern of attitudes and actions of these members. However, in treating culture as an independent variable imported into the organization, many writers in the area of comparative management have left the concept of culture relatively undeveloped (Bhagat and McQuaid, 1982). A trend which has been noticeable in recent years has been to couple the recognition of cultural factors in multi-national organizations with the economic necessity for global interdependence, with particular emphasis being placed on the Japanese experience (Ouchi, 1981; Pasquale and Athos, 1981). It is somewhat paradoxical that this should have occurred since the requirements for global interdependence seem to present a challenge to the unique social phenomenon which is represented by culture in each of different societies.

An alternative perspective to the link between culture and organization may also be found in the increasing use of the phrase "corporate culture", which is a recognition of the fact that organizations themselves may be culture-producing phenomena. As elaborated by Louis (1980), Deal and Kennedy (1982) and Martin and Powers (1983), organizations may be viewed as not only social instruments producing goods and services, but also, as by-products, certain distinctive cultural artifacts such as rituals, legends and ceremonies. This idea has been developed alongside the more generally-held notion that organizations are themselves part of a wider cultural context in any given society. Given that there is a sizeable body of research which has been carried out on organizations using the framework of a general systems theory, incorporating variables such as structure, size, technology and leadership (Woodward, 1965; Fiedler, 1967; Pugh and Hickson, 1976), the con-

cept of corporate culture has been introduced as a recognition that symbolic processes occur within organizations and can affect the way they deal with their environments. Corporate culture has been defined as a social or normative glue that holds an organization together (Siehl and Martin, 1981; Tichy, 1982), since it expresses the values or social ideals and the beliefs that organization members come to share. It can be seen as operating very strongly in those professions which tend to codify the careers of their members from selection, entry, training through to practice itself, such as the legal profession, medicine, the church and the armed services. The benefits of a well-formed corporate culture are evident: the conveying of a sense of identity to members of the organization; the generation of a commitment to something larger than the self; the enhancing of stability in the social system; and the creation of a device that can guide and shape behaviour of both individuals and groups.

Although the ideas expressed about corporate culture are more subjective in character than those commonly associated with the field of comparative management, they are compatible with one another in the sense that they fit in with the systems approach and are consistent with what has been called the functionalist paradigm (Burrell and Morgan, 1979). The main assumption behind this paradigm is that the social world expresses itself in a number of general and contingent relationships among its more stable and perceived "variables" (Morgan and Smircich, 1980). The organization is an organism that exists within an environment which presents certain imperatives for behaviour. Whether "culture" is perceived to emanate from the environment, imprinting itself on the organization, or in the form of organizational

culture as a result of human enactment, organizations and cultural are defined in this view as intertwined through the pattern of relationships across and within boundaries.

The development of ideas thus far about the linkage between culture and organizations has moved us from a position of seeing culture as a force outside the organization affecting it to being a factor inside the organization having an impact on other variables as a variable in its own right. We may reasonably let our thoughts wander further as to whether culture is the root or dominant metaphor at work in organizations or whether culture is the very nature of the organization itself. It is possible that this conclusion has not been arrived at earlier because so many organization theorists have stressed that organizations are organisms, and that this has distracted us from the notion that culture is the prime organism and that an organization is either an organism or a machine operating within culture.

The idea of culture at centre stage owes as much to the work done in the field anthropology as does the idea of organismic organizations to the development of system theory. However, even within anthropology culture has been conceptualized in diverse ways. The cognitive perspective is preferred by those who believe that culture consists of shared knowledge (Goodenough, 1971; Agar, 1982). In symbolic anthropology, culture is a system of shared meaning (Hallowell, 1955; Geertz, 1973). A position adopted in structural anthropology and psychodynamics is that culture is a manifestation and expression of the mind's unconscious operation (Rossi and O'Higgins, 1980). Within those contexts, the role of organizations has been differently conceived, embracing such notions as organizations as theatres (Goffman, 1959; Mangham, 1978), texts (Ricoeur, 1971), and psychic prisons (Morgan,

1980).

The Cognitive maps within Oriental Gas Products

Our theoretical journey has covered ground which varies from the extreme macro approach (even to grouping cultures together), to the societal and through to the organization. It has also led us to consider whether organizations and their members may be assessed in an objective sense as filters of culture. In a great deal of the research carried out there has been a tendency to look at organizations and societies as phenomena which portray a unified cultural picture. A scrutiny of this subsidiary of a multi-national organization reveals how difficult it is to fit the organization as whole into a cultural typology. As an organization it is the result of anglo-french investment operating in a predominantly chinese setting, with constituent members of management drawn from eastern and western cultural backgrounds and a predominantly chinese workforce. When we examine the micro detail of this organization, the difficulty of fitting it into a macro definition involving culture becomes all too apparent.

Even if the enquiry is reduced to the level of individual actors in the managerial sphere, other questions may arise. How typical a product is a particular individual of the culture from which we perceive that he or she emerges? How typical is the behaviour of an individual at any moment or over a period of time, especially if that individual is influenced either by adjustments to be made when working in a foreign cultural setting or by the corporate culture? The attempt to reduce our curiosity and mode of description to a micro science is not fruitful. Instead, it is proposed to address each of the actors in the managerial group directly on the role of culture in the context of his or her work and, by letting them set the agenda, to explore the

direction of this subjectivist path. Insofar as we are dealing with a patchwork quilt of actors and impressions at a fleeting moment of time, the results are almost the opposite of what conventional science is supposed to represent. Instead, what is offered is a series of small paintings of what is conceived in the minds of the actors as the cultural effect on the context of their work. In giving out these impressions, they may be conveying the reality of their view or what they perceive to be a cosmetically acceptable version of their view. One of the differences between the natural and the social sciences is that, as far as the latter is concerned the cosmetically acceptable view may in fact be the true reality, if not an alternative version of it.

As elsewhere in this thesis, the general point of the conversation up to the response is in parentheses.

Managing Director (English)

[Is there a cultural effect to take into account in the running of this organization?]

"Oh yes, I think it comes in in a variety of ways. You mentioned initially the mixing of east and west cultures. I think that one thing that tends to be fairly clear is that there is a difference in management styles between western managers, who tend to lean more to the democratic end of the spectrum, and chinese managers, who lean more to the authoritarian. In many ways, when you are working in a organization which is predominantly chinese, there is a greater acceptance of the authoritarian management staff, so you are left with the impression that western managers continue to do the right thing despite the fact that it is not really required by the same pressures of a western organization. I think we are also dealing with different attitudes to-

wards relationships within the organization. For instance, there is much less willingness to criticize or comment on the relationship one has with a superior than there would be in a western organization.

The impact of that is felt on ones ability to run appraisal systems, particularly appraisal in the western sense where one has a discussion about relationships and, from that, the results of an appraisal. This causes us to modify the sort of systems that we would apply to the group".

[Do subordinates see you through a form of cultural perspective?]

"I am sure they expect us to behave in a certain way and often with a typical stereotype. Take for example our negotiations with China which often cause problems. We have one of the chinese managers here negotiating with his counterpart in China. At that level of negotiation it is clear that there is a great willingness to leave things very vague and not be specific about certain issues. I often hear my chinese manager comment that in these circumstances there is a pressure on them, since when they come back to me I will demand from them that everything is specific. In fact, they will end up saying to their counterpart across the border "Look, I have this very strange european boss, and although we are happy about this, he wants it all to be clear cut". I think that they do recognise that we do operate differently and need to operate on different cultural levels".

[You have used the cultural factor not just as a matter of style, but the form in which a business proposition is put in detail].

"I use it to achieve results. I encourage our people to say in discussions in China that we have to have things done in this way to satisfy my boss. He will say that he does not really want to do things in this way, but this allows them to do things without any loss of

face to the other party, and then they can blame it on the european manager."

[Have you won most of the battles, or has the Chinese side won more by its effort to keep things in more general form?]

"I think it is a compromise frankly. In the end in almost all our dealings there is perhaps less specific emphasis on detail than I would like, but it is more than would have resulted if they had been left to their own devices. In a company like ours we are constantly dealing with and accepting a situation that is not subject to day-to-day control from overseas, but which runs quite autonomously in this place. We fall between two camps. We are neither a traditionally western multi-national operation nor we are the traditional chinese manufacturing concern. It causes us - particularly in the area of personnel - to have to think where we want to position ourselves. I have to rely heavily on my chinese managers who are able, because of their education and background, to see both sides and I have to be guided by them on what the reaction of the chinese employees will be."

[Is there a corporate identity which could be a form of corporate culture?]

"I think you are right. There is a corporate identity which is quite strong. A lot of our employees have served in our company for a long time. We certainly do get a feeling of perpetuating particular staff, so that regardless of the management personalities of the time, you recognise that when you have gone certain elements will carry on. This may not be always evident for instance in the willingness of people to mix as a group after hours, but it is certainly evident in the work situation."

[Has your organization deep roots in this place?]

"The integrated gases company has been in place here since 1962. Before that the two companies operated separately, the French and the British, and there are still those around who despite the joint venture identify with one or the other of the original companies. Although much of our work is to do with technical or financial criteria, there is always scope for interpretation which allows the individual to portray his own background beliefs."

Finance Manager (Chinese)

[Do you see cultural factors at work in this organization?]

"It is difficult for me. When I joined the company as Chief Accountant, I had already a chinese manager, so there was no cultural clash for me. As you know, I was promoted to my present position just over a year ago, but still there is no cultural clash as far as I am concerned."

[The word "clash" is a strong one. Are there differences in the way people approach problems and make adjustments?]

"I really cannot comment on that, because I have been working with western organizations for such a long time. After I left school I joined the Government here for a time, then on to a British firm before joining Oriental Gas Products; so all of these are predominantly western organizations. It is difficult for me to say what my approach is. Although I am Chinese, my qualifications are western, and so far as analysing a problem or solving it are concerned whether from the textbook or experience, I suppose it is western-influenced."

[You feel influenced by western systems, so presumably you are not shocked by western personal approaches to problems.]

"I don't think so. We have some people now working in China or who

have very close contact with China, and from them I can see the difference. I don't know whether you agree, but whenever a western organization does anything they like to do it in a very legal way; everything has to be properly documented according to a set schedule or procedure. If you are dealing with the chinese, it is very difficult for them to get into a very detailed agreement on a joint venture. They would like to have some sort of agreement, but they would like it to work on a mutual or friendly basis, rather than a strict, comprehensive, legal document. I see the difference in that way, but then I have been more exposed to western ways. I tend to stick more to the legal side if we are going to do anything. Lets have an agreement set out or possibilities that we can stick to."

[Most of your workers here are chinese. Would you say the way they act is typically chinese? If so, how would you characterize them?]

"Well, those working under me are usually well-educated to the secondary level in the territory. Their standard of English must be up to a certain level before they can join the company, so this means that they are in fact the more westernised orientals already. From the comments I hear from expatriates when they are dealing with the chinese workers, the concept of "face" is very important. You cannot allow them to "lose face".

[How would you describe "face"?]

"For example, if you know that one of your staff is doing something wrong, you can indirectly point out the mistake rather than saying directly "you are wrong". Done this way, the person will not lose face!"

[Mention was made earlier of the chinese preference for a general rather than a legalistic agreement. Is this because a general agreement

allows more room for "face", because you cannot say that the other party said they would do something and have not done it?]

"I think that may be the reason; but I have had exposure to that environment inside China. The difference between the chinese and western way is not huge, particularly when you have been educated in the western way."

[When you go home at night it is presumably a chinese context. Do you feel a different person when you are at the office? Do you have to make adjustments? Can you relax more in one than the other?]

"No, there is not that much difference, apart from the language. If you are going to a gathering with western people, the only potential problem is the language one. This territory is a special place: the language of commerce is English, whereas at home we speak a different language. That is why although in business terms you can communicate quite well with your colleagues if they are westerners; but if you are coming to a social gathering then it is something very different. In a social gathering you must know so much more, and that's the aspect I feel uneasy about. Although it does not affect work very much, in some other way it will because you miss the more personal aspect of relationships."

General Sales Manager (Chinese)

[Do you believe that there is a cultural factor at work in the organization?]

"I think there are always cultural differences at work in an organization, especially in one like ours where we have British, French, Chinese - all quite drastically different. However, I think the difference in culture has more of a positive than negative effect on the

company. Perhaps the only problem area is that of language or communication, which can slow down activities and lead to certain misunderstandings. Other than that I really don't see much that has a negative impact. Sometimes I see a very positive impact because of the different views and different visions that come up."

[You do not see any difficulty being a senior chinese executive who is working in a company which is western-owned?]

"No, I don't think that is a handicap. I feel that in this territory it could be an advantage being a local chinese, because I have more knowledge about the environment in the market place than an outsider would have."

[Do you mean the ways of thinking and of conducting business?]

"One very important point is that this place is changing. Ten years ago when I went out to negotiate for contracts 70-80% of the people with whom I negotiated for major contracts were europeans. Today I can hardly find one of these people to negotiate with as customers."

[Why is that?]

"I think it is the change of the local management being more dominant now in organizations in general. Ten years ago they would have had difficulty in finding capable people to do the job. Now that has changed."

[Do you see cross-cultural elements as a positive force then?]

"I think that it is a positive force and not only for us here. The cultural element not only brings with it differences. Our expatriate colleagues come in with certain knowledge that they accumulate in our parent companies which I think is essential for a company like ours."

[Some have suggested that the western manager tends to be trained to

a rather structured, objective view of situations, his arisen counterpart, whilst no less capable of objective assessment, is in a different sense more comfortable with a group or team experience.]

"Although what you say applies less to me personally, I think the point is important. One project which highlighted this more than anything else recently was that of performance appraisal. We had a discussion on this topic a couple of days ago. As a result we decided to make our appraisal scheme less person-orientated and to make it more activity-orientated. In fact, we are not calling it performance appraisal: we are hoping to call it something like activity review in order to make it more dynamic and relevant, and therefore more acceptable for use in a chinese cultural context. Whatever appraisal forms we get from our parent companies would have to be changed to be effective here.

There is also another big difference at the worker level insofar as they are much quieter and a lot more restrained in saying what they think than western workers. In that way the superior here is required to pay a lot more attention to finding out or sensing their needs and what they want."

[You have just returned from an extended secondment in Australia, so in a sense you have seen a form of western culture in action. Are your remarks based on what you saw?]

"Oh yes. I have also lived in the United States for about eight years. Yes, I believe there is a big difference between the cultures of the west and of the orient."

Operations Manager (English)

[Are cultural factors an issue in the work situation here?]

"I am not sure how to answer you whether it is an issue. Ever since

I have been here I have been aware of enormous cultural differences; in fact, much bigger cultural differences than I have experienced anywhere else (and I have worked in a lot of parts of the world).

Although the european cultures are long and ingrained, chinese culture is incredibly strong, very ingrained and not very flexible. Nowhere else have I come across the two cultural traditions that are quite so different and both so strong. The chinese culture in particular is very dominant in the lines of people and their attitudes to people. It is not very flexible and always very close to the surface. You could perhaps say the same about european culture too, but the europeans here are in the minority and we are also aware that we are working outside our own environment. We are also generally a group of people who are used to working in different environments where, to some extent, we have learned to adapt, so I guess we feel that we don't enforce our culture as strongly as the chinese people. That's just general, but within the company there are quite different attitudes. I suppose the area where you see a strong difference is in the attitude towards people, where western culture is much more concerned about the employees than is the chinese. We come from an environment that is very much orientated to industrial relations. We are very frightened that if we can see what can and what will happen in an adverse sense here we are trying to pre-empt it, whereas our chinese colleagues either don't see or don't believe it will come about. There is a definite conflict of attitude there. The westerner is very much concerned about relationships and the impact of events on employees."

[Does this situation lead to compromises being effected, or is your attitude not to interfere as long as things are running smoothly?]

"No, I don't think we expect the organization to believe in the way

we would expect in Europe; but in some respects we let it roll, although there are times when we put our foot down and say we don't believe you can do that or you must do it the way we want. The result is not necessarily different, but it is generally about the way things are done. The european way is to do things diplomatically. Therefore it doesn't really affect the outcome of the situation or indeed the aims or the objective. I believe that in handling a matter diplomatically it is likely to be successful whereas it could fail if one tried a less sensitive way. In my experience a chinese manager would be far less concerned with the way it is done."

[Would it be, in a sense, authoritarian?]

"The chinese way, yes."

[By the same token, is there more respect for authority at the grass roots?]

"Well yes. It is quite obvious you can do things in this place that you would never get away with in a British context, that's for sure. We don't deny that, though I think we just put a limit on that."

[In practical terms, there are three expatriate senior managers in an organization of some 320 people. Are you saying that your influence is proportionately much higher than the 1% would suggest?]

"Yes. Given our present set up, the managing director, sales manager, finance manager and I are the senior four. Three out of these four are europeans, I am second in line to the managing director, so yes there is a very strong influence over what happens by the european element in management."

[Within the descriptions so far, is there such a thing as corporate

culture?]

"I suppose there is if you compare this company with others in the territory and you would see things emerging in a certain light. I think we are different from the traditional chinese manufacturing company. A small way in which this shows is that we observe all the european as well as the chinese holidays, whereas most of the chinese manufacturers observe only the chinese holidays. We celebrate Christmas and have no Annual Dinner at that time, which no truly chinese organization would ever do. So we are a kind of hybrid, but for practical reasons we celebrate all of the chinese holidays for the simple reason that the majority of our customers do not work on those days.

Corporate cultures also means that we have a personality which is reflected in the type of people we employ, which would have similarities throughout the world. We tend to employ people who stay a long time, so the workforce is very loyal. That is fairly true of the gases industry worldwide, compared with an electronics company which would almost certainly have far more transit workers."

[Is it that the nature of the work attracts the personality?]

"I am not sure if I understand it fully, but the industry does seem to attract among its loyal and permanent workforce a tremendous number of ex-navy people. It is to do with the kind of equipment we operate and the shifts we work. In our organization we do not seem to attract as many ex-navy people as the industry at large and so basically we attract a lower calibre of person here than in Europe."

[One persistent story about an aspect of culture is that the chinese people have a very strong work ethic. Do you find that?]

"They are hard working in that they are prepared to work very long

hours, together with overtime. In Europe there is a common feeling among a lot of people that although overtime is available they should get the money into their basic wage and get the time off. Here I think the attitude is that there are so many hours in the week and so the more hours I work the more money I will get. I don't think they work any harder by the hour than elsewhere."

[Does the pace of process work dictate how hard people can work?]

"Maybe in some areas. There's not much room for comparison, but in an area such as maintenance the pace is not dictated. They do not work harder than the europeans, but at the same time the chinese are not so militant about it. Here they take just as long over a tea break, but they do it secretly or at least quietly. In Europe they get up and say "I must take ten minutes to wash my hands before we go off for tea". Here they just take it. If you argue, they just shrug their shoulders, go to five minutes and work their way back to ten minutes again".

Distribution Manager (Chinese)

[Do you see a cultural factor at work within Oriental Gas Products.]

"I think that the effect of the cross-cultural element is not so great. The personal element is more evident than the cultural. When people talk about the difference between East and West, the implication is that there is not a great deal of difference between the British and French. But I feel that the difference between the British and French way of working is even greater than that of the British and the Chinese".

[Could you elaborate?]

"I think it comes out in the way of tackling problems. Maybe my opinion is biased because I only look at a few people. You see, I don't

feel that there is too much conflict or difference between the locally-born chinese managers and the british managers we have from overseas. Amongst the latter I have worked with, most adapt quite quickly to the local culture in the way of thinking. For their part local chinese managers are already adapted to the western way of life and thinking. There is of course a difference in the way we are brought up and the cultures are different. However, the differences are not unmanageable. During work we can always understand each other: we can work together without too much of a problem."

[The cultural factor does not seem to produce many disagreements.]

"Sometimes there are but it is in the way of tackling the problem. If the difficulty is in the management area, sometimes the ways of tackling the problem are quite similar. People like our British Managing Director can quite understand the local environment. When I talk of difference it is between the British and French managers here, where there is a lot of difference. It is mainly in the way of dealing with problems.

I have worked with two French managers here and, in many ways, they are quite similar. They tend to avoid problems, if you will allow me to say; they don't face the problems and they do not easily adapt to the local environment. They cannot see the way the Chinese feel, the chinese way of seeing the problem, whereas in my experience the British managers can put themselves on the chinese side and can see the problems as chinese. But the French people fail to do that and, the worst part is, they tend to avoid the problem. They do not want to face the problems and tackle them systematically. It might not be true for all, but it is for the two I have worked with."

[Do you find that chinese people readily accept authority in the work

situation?]

"Yes, I think that is true here. Some three or four years ago I had a New York procedure to set up, which was very new for this organization. My assistant had worked here for almost twenty years. He knew more than I about the gas industry, whilst I was totally new to this business. Despite this, I feel that people readily accepted my authority as a superior."

Sales Manager (French)

"There are without doubt problems of comprehension in my job. I have three subordinate sales managers and some fifty sales representatives and clerks in the area, all of whom are chinese. I speak English, but think in French. This has to be conveyed by a third party into Chinese. This is the case despite the fact that most of our customers speak good English.

The major cultural characteristic which impresses me about the chinese people - apart from the fact that they are crazy about doing business - is their pride. Of course, this is all tied up with the idea of giving "face". In China this becomes an extremely practical matter of giving something of the order of 5 - 10% discount off a deal to a customer (this does not happen here). You can say that a central philosophy is that "a dollar really is a dollar".

It really is a challenge working in an organization like this I see cultural differences evident in the different ethnic groups present in Oriental Gas Products. I suppose that in a way they confirm my personal stereotypes of each group - the French (logical), the British (intuitive) and the Chinese (authoritarian, a respect for authority and for seniority). These are not in any way scientifically deduced, but I see them as characteristics which are produced consis-

tently out of cultures amongst what you may call the managerial class."

Personnel Manager (Chinese)

[Do you see the factor of culture affecting the working of this organization?]

"This is a joint venture between two companies, British and French, which has established an image as a foreign-owned company over the last twenty years. For the whole of this period the managing directors have been expatriate, so our labour and staff see this as a foreign company with a way of doing business which is foreign. In the sense that we adopt a systematic approach and a western management style, our responsibilities are clear and certain. We have developed a system of governing the company which is not dependent on the personality but which is sustaining no matter who is in the top management seat.

If there have been changes in the past few years it has been that more chinese executives have taken the place of expatriates. Instead of making our management style more "chinese", what has happened is that our chinese managers have already adopted a more western management style. I do not think there are many conflicting ideas between the local chinese manager and the "expatriate" chinese manager."

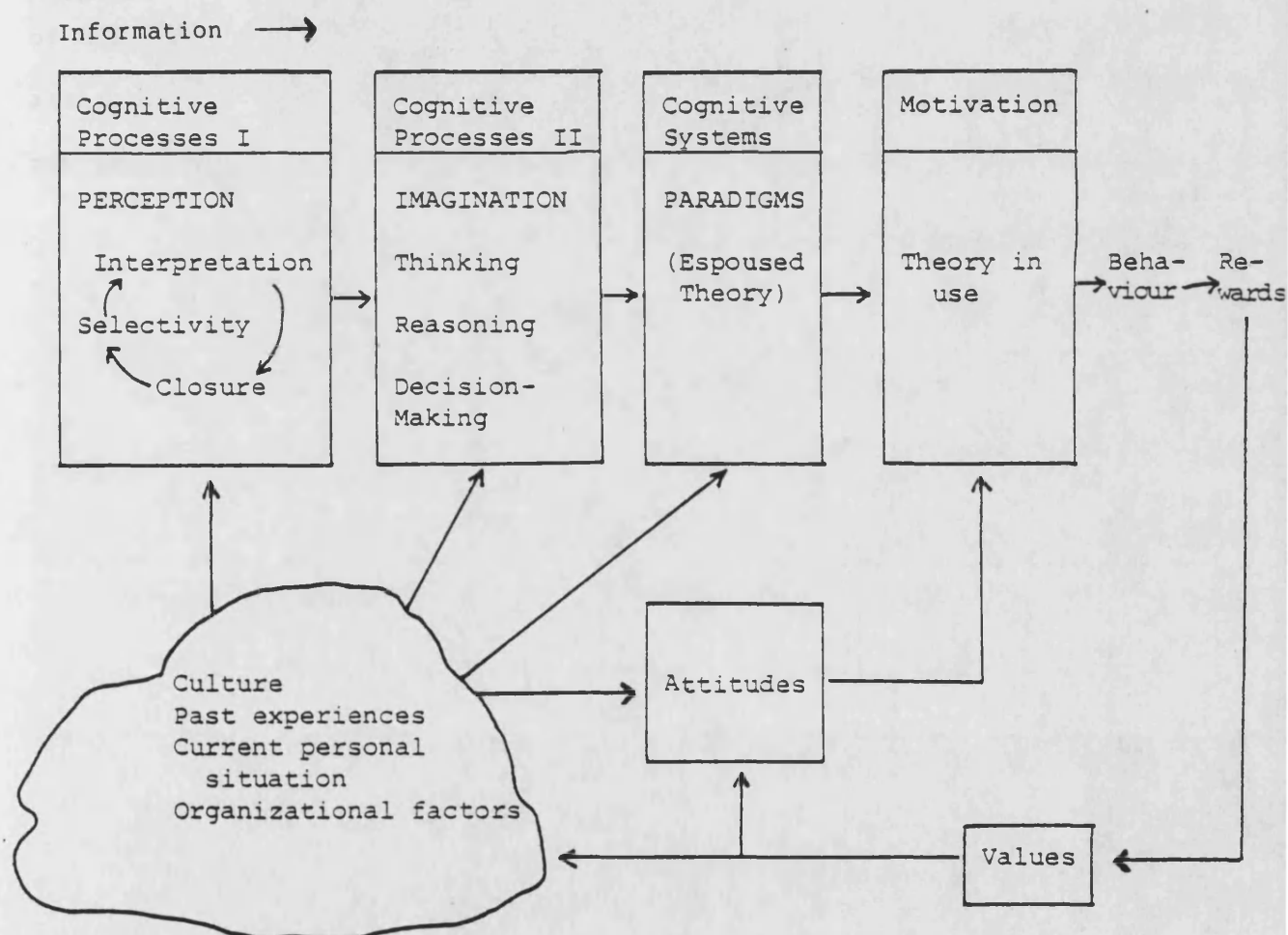
Cognitive maps: a road to anywhere?

The cognitive maps have been etched from a series of brief encounters with the seven most senior managers in this organization. An agenda covering the meaning and effect of "culture" on the lives and work of the individuals was deliberately set in the lightest and most general terms so that, as far as possible, the responses were not conditioned. Both the nature of the comments and indeed the over-

all extent of the exchange were largely in the hands of the manager in this organization. By giving a central importance to the individual's definition that he or she is, the approach was in some ways similar to the emphasis placed in the approaches such as ethnomethodology (Garfinkel, 1967; Cicourel, 1972) and in the Action frame of reference (Silverman, 1970; Harre and Secord, 1972).

Redding (1980) has put forward a model of the manner in which cognitive processes may be influenced by culture:

Figure 1



Three mental states are envisaged as operating between the receiving of information by a person and the motivation to behave in a certain way. In the first stage, perception of the information is mediated

by the workings of selectivity, interpretation and closure (Litterer, 1965) before coming under the influence of the Stage 11 cognitive processes of imagination, thinking, reasoning and decision-making. The products of this stage are then a series of cognitive systems or paradigms which are relatively stable over time. These are the "maps by which we steer" (Armstrong, 1973), the systems of both belief and understanding, whether articulated or subconscious, which act as the main guides to behaviour. It is then possible to distinguish between "espoused theory" (Argyris, (1970), which is what people say is the basis of their action, and "theory in use", which is influenced by affect and attitudes and which is inferred from how people actually behave. "Theory in use", is synonymous with a person's motivation.

When a person has moved through the cognitive processes to a form of behaviour, the affective processes come into play. Rewards, or valued outcomes from behaviour are associated with the earlier patterns of cognition in that people develop ideas about what is valuable to them and that this process serves as a guideline to future behaviour. Cultural influence is therefore perceived as one, possibly the most important, of the factors, which receive the results of the learning process and which in turn affect meaning in the cause-maps of the paradigms and the attitudes which make a person work out whether it is worth doing something on one way or another.

The exchanges with the senior managers of the organization provide us with a partial insight into the cognitive processes affecting those in authority, particularly in respect of cultural factors. Most evident amongst these perspectives is that which is represented by the divide between the three western executives and the four chinese.

Apart from being the most obvious point of polarity when the focus is upon cultural effect in a multi-national organization, this feature was discussed with a high degree of consensus by those concerned regardless of which side of the ethnic divide they stood. A bias towards the western mode of management and exchange was clear insofar as both the company ownership and representation in top management was well understood. The western managers did not speak chinese and, apart from contact with customers and internal group exchange where all parties were chinese, the formal business of the organization was conducted in english. This emphasis was accentuated by the fact that the four chinese executives would not have been where they were unless they had been highly educated in a western context, sometimes to the extent of spending several years abroad in the process. The resultant scenario is that of western managers working in an oriental context, with little or no contact with chinese people outside their working environment, and their western behaviour confirmed by the corporate culture as well as by ways of doing business. In the same scenario are their chinese counterparts who, in a sense, lead a double life in that socially and personally they are part of a chinese cultural background which is quite distinctive, but when they come into the work context they make seemingly automatic adjustments to western ways and ideas in their daily working lives.

It may also be said that the actors in this organization demonstrated that they are also involved in other definitions of "culture", apart from that which is commonly held to be the central definition of the term. One of these has already been alluded to as corporate culture. Numerous references were made during the interviews to the omnipresence of the organization itself as a conditioning factor in

the behaviour of its senior members as well as others. It has been commonly observed that when individuals join an organization they overtly, at least, commit themselves to the ethos which guides the way that the organization works - wholly or, if not, in part. Those who do not fit in with this scheme of things may lead a form of covert existence within the organization or may wish to quit. The encounters with the individuals concerned did not indicate any form of dissent from the general requirement to fit in with the corporate culture of which they were aware.

Whether it is defined as "cultural" or part of the corporate culture, the discussants continually referred to the differences between the western and the oriental perception of the way things should be done. Although by common assent the western way of doing things was the dominant theme put forward by all of the managers, the underlying current of chinese cognition was always there and beckons us to define it as we compare it with the western forms of cognition. In an area which is littered with anecdotes and personal experiences, the managers of this organization put forward a number of perspectives which would characterize the western approach as being methodical, somewhat democratic and requiring a precision in business arrangements which left everyone concerned with a clear idea of what was expected of them. By comparison, the chinese approach was more autocratic in flavour, placing a great value on hard work, but at the same time stressing the importance of accommodation within the working group, and the idea of a form of benevolent despotism amongst those in positions of authority.

Redding (1980) has put forward a number of supplementary explanations of the divide between East and West which have drawn upon certain streams of anthropological thought. One of the key areas is that of causation as perceived between the two traditions. Needham (1978), in his seminal study of the development of science in China, put forward a description of the way in which the idea of causation in the West took one route which began with the Greeks, culminating in Newtonian physics, while in China, over a similar period, the "course" element in explanation took on a different form:

"We are driven to the conclusion that there are two ways of advancing from primitive truth. One was the way taken by some of the Greeks: to refine the ideas of causation in such a way that one ended up with a mechanical explanation of the universe, just as Democritus did with his atoms. The other way is to systematise the universe of things and events into a structural pattern which conditioned all the mutual influences of its different parts. On the Greek world view, if a particle of matter occupied a particular place at a particular time, it was because another particle had pushed it there. On the other view, the particle's behaviour was governed by the fact that it was taking its place in a "field of force" alongside other particles that are similarly responsive: causation here is not 'response' but 'environmental'. (Needham, 1978: 166)

An earlier view on the cause-and-effect relations which seem to separate out eastern and western perspectives was advanced by Northrop (1944). An example of the distinction drawn is as follows: when a Westerner thinks about a problem it is normal for him to use abstract concepts or constructs such as 'productivity', 'morale', 'leadership style' and to link them in a logical and sequential set of con-

nections: the Chinese mind tends to resort instead to ideas which are much more concrete. Northrop defined these as 'intuitive' saying that concepts derived by intuition are those "which denote, and the complete meaning of which is given by, something which is immediately apprehended". His argument then proceeds as follows:

"Formal reasoning and deductive science are not necessary if only concepts by intuition are used in a given culture. If what science and philosophy attempt to designate is immediately apprehended, then obviously all one has to do in order to know it is to observe and contemplate it. The methods of intuition and contemplation became the sole trustworthy modes of enquiry. It is precisely this which the East affirms and precisely why its science has never progressed for long beyond the initial natural history stage of development to which concepts by intuition restrict one". (Northrop 1944: 223)

These and other views expressed along similar lines, were drawn together by Nakamura (1964) in describing important elements in the Chinese thought processes:

- emphasis on the perception of the concrete
- non-development of abstract thought
- emphasis on the particular, rather than on universals
- practicality as a central focus
- concern for reconciliation, harmony, balance

If we take these perceptions from an anthropological base seriously, they must have implications for the way that Chinese managers think and behave in organizations which are predominantly Western or Chinese in their values. Spontaneous reactions from numerous Westerners who have spent a considerable part of their lives in the Orient have left the writer in no doubt as to the unified feeling that

chinese thought processes and organizational behaviour show a distinctness and difference to that of their western peers. Western cognition is perceived as logical, based on sequential connections, using abstract notions of reality to represent universals: there is a consistent emphasis on cause, Chinese cognition, by comparison, is characterized as being based more upon intuitive perception and reliant on sense data. It tends towards the non-abstract, the non-logical (in the Cartesian sense), with an emphasis on the particular rather than the universal. There is also a high degree of sensitivity to context and the relationships within which life is conducted.

The question of a sense of time, and its obvious relationship to ways of doing business, has been the subject of speculation in the East/West cultural debate. A very prominent feature of many western-style organizations is their emphasis on linearity, with a well-defined time-sense and priorities, out of which emerge concepts such as punctuality, scheduling and deadlines. Compare this with a philosophical perspective expressed by Chan (1967).

"Absolute time was hardly touched upon in Chinese philosophy. With Chinese philosophers, time has always been associated with events. In Buddhism, since events are illusory, time is illusory. As such it moves on but will come to an end in Nirvana in Taoism, time travels in a circle, since a thing comes from non-being and returns to non-being". (Chan 1967: 135)

Hall (1976) developed ideas about cultures and time towards the premise that "organizations, particularly business and government bureaucracies, subordinate mean to the organization, and they accomplish this mainly by the way they handle time-space systems". He uses

the term 'monochronic' to describe the linear view of time in the West, and 'polychronic' in referring to the cyclical view in the Orient.

Combining the personal characteristics as perceived together with the type of organization which they produced, Hall developed the following typology:

Monochronic (e.g. Western, especially American) time perceived as linear

- One thing done at a time, in a pre-determined time slot.
- Emphasis on schedules, segmentation, promptness.
- Allows for extensive delegation, and long hierarchies.
- Tendency to schedule the goal and leave analysis of the job minutiae to the individual.
- Organizations capable of much growth.

Polychronic (e.g. Chinese) time perceived as cyclical.

- Several things can happen at once.
- General aim of completion without detailed scheduling.
- Centralized control and shallow structure.
- Control of individuals by the minutiae of what they do, but not when.
- Organizations usually limited in size.

The marriage of ideas from the individual with the shape and character of the organization forms a part of cognitive anthropology, which has been referred to as ethnoscience (Goodenough, 1971). Corporate culture is therefore generated in the human mind "by means of a finite number of rules or means of unconscious logic (Rossi and O'Higgins, 1980). The task of those who follow this perspective, therefore, is to determine what the rules are, to find out how the members of a culture see and describe their world. Harris and Cronen (1979) devel-

oped the idea that an organizational culture may be represented as a "master contract" that includes the organization's self image as well as the constituent rules that organize beliefs and actions in light of the image. They assume that the master contract develops out of personal interaction amongst the principal actors and that this provides the context for further interaction. The resultant is a continuous, organic state of adjustment and re-definition between the individual and the organization which is based on cognition. Similar approaches, based on cognition, have also been applied to the study of organizations (Argyris and Schon, 1978; Bougon, Weick and Binkhorst, 1977; Weick, 1979a, 1979b; Litterer and Young, 1981; Wacker, 1981; Ritti, 1982; Shrivastava and Mitroff, 1982; Bougon, 1983).

In the case of Oriental Gas Products we are confronted with an organization which is partly western and partly oriental in its composition, although by ownership and general consensus over managerial style the tilt is towards the western. In the process of this it has also been suggested that the chinese executives in this organization learn to a degree to "lead a double life" by retaining their chinese cognitive approaches whilst at the same time perceiving matters in a western sense and acting as part of the team in this perception. The "master contract" referred to earlier therefore contains some organizational imperatives in the case of this company which are undoubtedly chinese. Some writers have taken the evidence that we have in published form about the cultural imprint on organizations in an oriental context and have returned to suggest that there are certain patterns. Building on the monchronic/polychronic dichotomy of Hall, Redding (1980) defined some of the major characteristics of a chinese organizations, which he saw to be in marked contrast to the classical

Weberian concept. The main features of the chinese organization were its:

- Intuitive, contextual nature: immediate decision-making, without a formal planning framweork.
- Informality of organization structure.
- Low objectivity of performance measurement.
- Personalisitic external linkages to suppliers/customers.
- Nepotism, patronage and cliques internally.
- Centralization of power.
- High degree of strategic adaptability.

These impressions, which were gleaned from individual behaviour and a perspective on purely chinese organizations, give a portrait of an organization which works through informality networks and centralized power rather than through rationality, objectivity and delegated power. Discussion amongst anthropologists have suggested that there is a possible link between this informality of the oriental organization and some moral issues which are widely considered in the East. Bendict (1946), in a discussion of the Japanese case, but applicable in a wider oriental context, drew a distinction between the western cultures which emphasize "guilt" and oriental cultures which lay stress on "shame": "A society that inculcated absolute standards of morality and relies on men's developing a conscience is a guilt culture by definition... ..True shame cultures rely on external sanctions for good behaviour, not, as true guilt cultures do, on an internalized conviction of sin. Shame is the reaction to other peoples criticism..... Shame has the same place of authority in Japanese ethics that 'a clear conscience', 'being right with God', and the avoidance of sin have in Western ethics". (Bendict 1946: 22)

This process of socialization, which leads to a highly sensitive pride in the individual, means that conformity is often produced by the threat of wounding that pride. This concept is at the centre of the chinese definition of "face", which a force in the working out of interpersonal relations, negotiations, staff appraisal and in the person-to-person element in management control. The link between the shame culture and the Guilt culture may then be characterized by the following continuum:

The Shame Continuum	Loss of face	←→	Gain of face
The Guilt Continuum	Failure	←→	Achievement

In the former, control of the individual is external and in the latter it is internal. Amongst the managers of Oriental Gas Products it was clear that there was a grasp of certain essential points of difference in the managerial style which emanated from the cognitive perspectives. This awareness did not appear to give rise to undue friction or misunderstanding. However, it does not follow from this that the executives concerned displayed an immunity from the effects of organizational politics or the competitive interplay which would occur regardless of the ethnic background of the players. Cultural differences do not in themselves create or prevent difficulties: indeed, the experience of Oriental Gas Products would suggest that the awareness of these differences is as likely as anything to put people on their best behaviour. A more likely difficulty for observers is to witness discord or difficulty of any kind in such an organization and to avoid the assumption that it is automatically associated with the cultural effect.

Conclusions on the relevance of culture.

In looking back at the field of culture, insofar as it can be defined, I am inclined to agree with the findings of Roberts (1970) that it is "a morass". The inability of those involved with its influence, together with the inadequacies of researchers such as myself, to come to terms with the real influence of this dimension is a source of true frustration. Behind all the work that has been done in the area, especially with the interviews carried out, is the feeling that culture is an experience within organizations that is powerful and cannot be ignored, but that at the same time a precise definition of its presence, particularly with the passing of time, is very elusive.

From the wide variety of attempts at definition that we have considered, the greatest divide seems to lie between those influences which suggest that culture, on the one hand, descends upon the organization through a multiplicity of influences in a mechanical way to affect the way that the organization works in a structural sense, and the contrasting situation that culture is something that transfers essentially through people, or as we have called it, human agency. The literature and my experience suggest that both are contributory to the cultural experience of the organization, and that the balance of influence at any one time depends upon where you are standing at the time. Oriental Gas Products showed evidence of both the objective and subjective cultures, as illuminated by Triandis (1972). Objectively, the cultural import was mainly in terms of the systems, ceremonies, rituals and even hardware that came from being the joint subsidiary of an English and a French multi-national company. Largely embraced by

the term "corporate culture", this dimension owed little to the englishness or the frenchness of the parent organizations, and almost nothing to the chineseness of the environment in which the company was located. Rather it was the case that the objective cultural presence was "prudent business methods" which came down from the parent organizations, but which could be found in replica form in very many other business enterprises. Any "special" characteristic of these aspects of corporate culture were most likely to be attributed to the need to fit the needs of the situation on the ground, as compared with any distinctive feature of the ritual transferred. The most subtle aspect of this objectively-transferred culture was what has been popularly described as the "corporate image" reflecting the distinctive company approach to the handling of situations, as well as its relations with the outside world. In a broader economic sense these features of the organization were seen to be part of the "common industrial logic" highlighted by Kerr et al (1960), Harbison and Myers (1959) and Galbraith (1967) by which organizations were converging in many of their features and approaches as the modern world develops.

To the extent that the parent organizations allowed a considerable amount of local autonomy to Oriental Gas Products to run its affairs, the situation with this company could be described in the criterion defined by Thorelli (1966) as Polycentric. Whilst there was a considerable "objective" transfer of culture in systems and ways of doing things, a bridge was formed by the parent organizations into the "subjective" element of cultural influence by their selection and placement amongst the sevenmost senior managers in this concern. Whilst in one respect these appointees were the agents for

transferring the "objective" cultural effects, in a very real sense they were carriers of the range of personal beliefs, values and idiosyncratic ways that are involved in "subjective" definition of culture.

On a personal level amongst the managers encountered there was a great awareness of the distinctive differences culturally that the ethnic background of their peers brought about. To some this was emphasized quite strongly, to others it was a modest influence. I formulated the view that quite naturally people bring substantial elements of their cultural (largely ethnic) background into work with them, particularly in a multi-national, multi-cultural organization such as this. The real issue, however, is the extent to which this is maintained and transferred into the workings of the organization, or is in some way subordinated to the dictates of the "corporate culture", which in this case is heavily western-orientated. The Chinese managers revealed a capacity to "lead a double life" in the sense that, although true to their ethnic background, they were all educated in a western environment and found no difficulty in effecting a transfer of values on a day-to-day basis between the society in which they had been born and the corporate society in which they spent their working lives. The most obvious way in which this was apparent, though unrecorded in our fieldwork, was the way in which two Chinese managers would converse in their lingua franca if no one else was present, exchanging the complex symbols, rituals, and meanings that this sort of encounter naturally brought about. When a western manager was present in a situation such as this, the conversation was automatically carried out in English, with the Chinese managers making

the semantic and cultural adjustments. It could be said that this is the outward symbol of cultural assertion or compromise, and that what is important is the inner or truly transferred meaning of cultural effect.

In the case of this subsidiary of two multi-national organizations we saw the influence of the "objective" culture of tangible things intermingling with the variegated pattern of "subjective" culture transferring through the principal actors, as well as other people in the organization. Such a scenario does not lend itself to clear-cut definitions about what is going on at any particular moment in time, but as the term culture itself suggests, we are left with a rich and moving tapestry that cannot be written out of the script of this organization. I am left with the experience that organizations themselves are appropriately the vehicles of the transfer of a huge amount of cultural experience - whether this is objectively or subjectively defined - and with the lingering thought that organizations are organs of mediation which stand as crossroads for the handling of human experience and the material phenomena which this produces.

The frustration in definition is largely of a conceptual nature. At the practical level of working in an organization, the fieldwork of this research revealed that managers are too busy getting on with the job to be pondering excessively on the nature of their cultural input. As with any feature of a person's body, face or sex, the working organization is aware that cultural factors are there, that they may well have an influence on the way a person behaves, but that we can never be certain whether a particular initiative or form of

interaction between people is the result of a cultural input or of any other factor which is contingent to the situation. The situation is less to do with people's ability to define their cultural impact and more to do with the requirement on a day-to-day basis to grasp complexities, work through individual differences and make sense out of situations. In this way, as the managers of the Chinese, English and French cultural traditions demonstrated in Oriental Gas Products, individuals and ultimately organizations are able to assert themselves - re-inforced by the corporate culture - to put out a distinctive message to the world and to conduct a successful business at the same time.

CONCLUDING THOUGHTS

At the beginning of this work a comparison was drawn between the form of enquiry which was based on the physical sciences or a technological basis on the one hand and that in which human agency or discretion played a large part on the other. Contributors in the field of organizational analysis have over the years shown themselves to be in a state of considerable disarray over whether they should approach their subject from the physical/"scientific" standpoint or from the position of human beings who create and run organizations. In a concluding chapter the conventional wisdom of the scientific approach is that original hypotheses should be re-visited, results examined, and conclusions formulated from the summary of findings. The clear-cut pointers of the scientific approach are not so readily available as the enquirer moves along the continuum to the more humanistic position, where the pattern of responses may be more variegated or indeed conflicting, because human perspective does not easily lend itself to classification which is consistent or predictable.

An early point of conjecture which taxed the mind of the writer was the extent to which the selection of the organizational subject conditioned the methodology to be used and, by the reverse process, the way in which a prior selection of methodology affected the choice of sample. A typical example in the physical/"scientific" tradition would be the selection of several organizations and the comparison of a number of pre-determined aspects of their functioning in the search for objective classification. Such an approach would be

more difficult to follow within one organization, as the tendency would be to reduce the comparative analysis to description. The identification of one organization, instead of several, is amenable to a number of processes of enquiry which the interpretive tradition places value upon because the actors are all under one roof and their interaction is more meaningfully explored than if they were spread amongst different organizations.

To the extent that no one can take up a position that is regarded as impartial or free from conditioning, it is perhaps in order to re-define the situation in the mind of the writer when this work was started. At base there was a curiosity about why an organization functioned as it did through the initiative of human agency, which had set it up and sustained it, and some of the systems which affected its continuing life. This curiosity stopped a considerable distance short of the desire to make a statement about the universal applicability of these systems, or whether they were comprehensively defined in the first place. Also, since the human agency selected was a small number of people in managerial positions, the question of contingency overtook that of universality. The selection of one organization and of principal actors within it already meant that a "partial position" or, it could be said, some points of hypothesis, had been established.

The writer also saw his own position as the enquirer in the situation in a somewhat special light. I saw myself as a "Visiting actor", with considerable experience of being a member of different types of organization and having been conditioned in thinking about organizations by familiarity with comparative literature. This point

is put forward as relevant, since no one can claim to be totally divorced in their thinking processes from the background which had brought them to the point of enquiry. The encounters within Oriental Gas Products were undertaken with this background in evidence, and this accounts for the prominence given to comparative ideas in organizational analysis in this work. In other words, the portrayal of the exchanges with the principal actors were treated as a totality, projecting at the same time the background state of mind of the enquirer.

The admission of the enquirer into a dramaturgical process with people in an organization is not such an unusual position, since many researchers in the functionalist or positivist mould inject their ideas and frameworks into the arena of the organization and expect their population sample to respond accordingly. In an example such as this, there may even be a danger that the frameworks do not correspond to those which a respondent would ordinarily use, so an element of artificiality may be present. It could not be claimed that this danger was totally absent in the arrangements with Oriental Gas Products, but an attempt was made to minimise it by a loosely-set agenda.

The devil, playing advocate to the position adopted by the writer thus far, would doubtless say that from an innocent beginning it was now very partial: one organization, not several for comparison's sake; a capitalist organization in character; the intermediary agency of small elite group of managers, projecting a subjectivist view on situation in which they had a vested interest; and the whole situation looked at in the wash of other people's perspectives in entirely different organizations. However, it quickly becomes apparent that every-

one who attempts organizational analysis at first hand is partial to the extent that no organization is characterless. Even the way in which organizations may be characterized can be in dispute, so we cannot accept this aspect of partiality as a reason for not proceeding.

A great deal of what happened, once the decision had been taken to proceed, hinged on the writer's perception of what mainly constituted the organization being created and sustained. This was earlier defined as human agency. So whilst technology, systems and material things were not unimportant, they were dependent upon human agency creating them and took on their characteristics mainly in the form set by critical human judgement. This reasoning led to the formulation of a framework of enquiry which was highly pragmatic. Four stages of curiosity were reflected in the organization as it was perceived by the writer.

Firstly, the reasons behind the creation and sustaining of this organization were seen as variations of political will, power and the authority to fashion what went on in the organization. Collectively this is referred to as power, and it constituted the basis of the enquiry. This identification of power and its role in organizational affairs was in early re-inforcement of the emphasis on human agency as the source of things happening, rather than technology, systems and other material means. Power is essentially given to people or taken by them from other people,

The second focus of enquiry followed logically from the identification of power. By what means and to what end was this power used?

Amongst a number of possible outcomes, the notion of control emerged as the most all-embracing term to describe the outcome of power. Here was an aspect of organizational functioning which many enquirers would have endeavoured to define in mechanistic terms. However, the view was taken in parallel to the discussion on power, that control was an effect of human agency and not to be confused with its material outcomes. If this is true it stresses the results have to be negotiated in human terms for there to be any effect, and so the dramatization through the perceptions of those with power was used to establish the character of control. The terms of access to Oriental Gas Products did not permit what might have been an imaginative extension of the work in this area, to include the perspectives of all people in the organization to be initiating it. The idea that all people in an organization are to a degree controlled was more readily accepted by the writer than that all people have power.

The line of curiosity concerning the role of power and control in the organization led to the conclusion that these two forces subsumed a great deal of what went on in Oriental Gas Products. At this point it was impossible to see the organization standing on its own, immune from the influences of the society in which it was located, regional and world factors, as well as the overall market conditions in which it operated. This led to the identification of environments as a contextual factor of considerable importance to the life of the organization. Some authors have characterized environments as material systems operating on different planes, and therefore different from the

emphasis put on the role of human agency in the discussion on power and control. This view is not altogether accepted by the writer, since in many instances the environments were the result of human agency rather than the outcome of accidental occurrence in society. Environments provided a rich and tangible frame for the perceptions of the principal actors in this organization.

Finally, an area of curiosity was aroused by the cultural milieu in which this organization worked. Given the centrality accorded to the role of human agency in this work, it appeared to be an important dimension to take into account since this was a subsidiary of a multinational enterprise, with managers drawn from different cultural backgrounds. Culture was perceived to have a special dimension insofar as it was operative in different forms both inside and outside the organization. Out of the various dimensions examined, culture is arguably one of the most difficult to define and track in its working in organizational affairs.

In establishing four areas of curiosity, the question of causality was never far away. If the encounters within this organization had taken place using "scientific"/objective methods, the underlying assumption would have been that for each finding there is one truth, one reality, which is there regardless of human ability to tap it. In this sense, ambiguity should be absent, since there is one or a number of causes relating to an effect: what is on test is the human ability to come to terms with reality. The work in relation to Oriental Gas Products did not harbour ambitious of scientific purity since both peo-

ple and material situations were involved and primacy was given to the role of key personnel in taking decisions which moved this organization forward. It could therefore be said that the enquiry was partly objective in the sense that facts and situations were objectively assessed in the picture of Oriental Gas Products. It might also be said that the enquiry also contained a great deal that was subjective, as the principal actors were used as filters for looking at the situation and the four major dimensions "as they were". In these circumstances the truth is not unitary, but more of a mosaic. Reality can be agreed, complementary, or even contradictory, depending on where you stand. This is not an argument that reality does not exist in a single form, but that in the "political" atmosphere of imperfect people interacting with each other, the imperfect organization will allow itself to be seen in different lights by people looking in at it.

The root assertion concerning the establishment and continuation of this organization is that the necessary fuel is the element of Power. In different forms power was seen to reside in people, who had set up the organization and ran it, and in the organization itself by means of the authority structure which it set up, as well as the legal power bestowed on it to operate by society. But most obviously of all in the experiences within Oriental Gas Products power was most manifest in the relationships between people, whether directly in a one-on-one exchange or by achievement in a network of relationships. Out of the three dimensional aspects of power which were elaborated by Lukes (1974) two were less obvious in day-to-day conduct: the one-dimensional in

which A can force B to do something he would not otherwise do; and the three-dimensional in which the organization and/or society moulds the individual to have the wants created by the organization or society. The first of these was only resorted to occasionally by managers over subordinates in extreme situations: the second was such a subtle form of conditioning over a lengthy period that it was almost impossible to track. The most prevalent form of power exercised in this organization was the two-dimensional, in which institutional practices affected B to the extent that he was unable, for practical purposes, to raise matters which were detrimental to the interests and preferences of A. This type of power was most evident in Oriental Gas Products in work procedures, statistical and safety limits, operational goals, powers to discipline, and an ineffectual system of industrial relations.

A number of the key actors stated that their managerial style was partly consultative, but this point never came through with great conviction. The quality of power which this reflected was one of benevolent paternalism in certain of the actors, with a fleeting hint of despotism in the event that employees were not reasonably compliant with managerial initiatives. The picture emerging from the minds of those encountered in Oriental Gas Products is that they were, without necessarily realizing it, articulating the Weberian concept of authority or domination in terms of a command-obedience relationship, stemming from the rational-legal legitimation of a bureaucracy, which was based on knowledge, expertise and sheer incumbence in office by those in authority. Alongside this formal conceptualisation of where power came

from was what we have described as the "underground" aspect of power. This phenomenon was apparent in the way that the principal actors interpreted their power roles apart from that which might be thought to be appropriate to the position they held. Such a personalized, idiosyncratic perspective was linked to the length of experience, the managerial specialism of the individual, proximity in working relationship to the managing director and association or otherwise with the "dominant coalition". Already a picture was emerging in this organization of a filtration process of power which had emerged from society (mainly from a basis of Law, but re-inforced by custom as part of the cultural tradition), through the organizational imperatives of structure such as appointment, accountability and power position in the hierarchy, to the individual. Ultimately the power has to be adopted by the individual from whichever level it emanates and it has to be incorporated in the personal contribution of that individual, even though the outward manifestation of power is in a group effort of which the person is a member or in indirect forms referred to as "referent power" (French and Raven, 1969). All of this is carried out in a variety of day-to-day situations which may add their own contingency effect, throwing up the degree of power attributed to the individual by others in the organization as greater in one situation and possibly less in another, or conceivably on a consistent level over a period of time.

Whilst the phenomenon of power may have a number of origins, a multiplicity of definitions as it wings its way through societies and organizations, the final arena in which it exercises its ability to

get things done lies in the position occupied by the individual with authority, allied with the beliefs and personality of the individual who exercises it. Oriental Gas Products displayed patterns of power amongst its small number of managers which were roughly proportionate to their position in the structural hierarchy. However, within this pattern there were a number of idiosyncratic versions to be seen of authority to act which made up for differences in interpretation between the actors. The Managing Director was primarily Weberian in approach, stressing that he set the course and the organizational sinews of delegated authority did much of the rest. The Finance Manager saw a great deal of power built into the nature of the function over which he presided and the position he occupied: a use of power reflecting paternalism and a sense of discipline were the outcomes of this position. In contrast, the General Marketing Manager perceived his power emanating from the organizational balance between authority in his position and participation from other members of the organization. Although commitment was stressed in this way, there was also a well concealed part of this manager's elaboration on power that suggested the paternalistic/autocratic influence alluded to earlier. The Operations Manager put forward a conceptualization of power which was based partly on the technical imperatives built into her sphere of responsibilities and partly on her perceived position in the structure as second only to the Managing Director. She was also aware of the compact, concentrated nature of power experienced in a small organization in comparison to the diffused spread of the larger organization. Having considerable

responsibility for resources and small degree of power was a perspective brought to the encounters by the Distribution Manager. This in itself was relatively rare amongst the managers since it was more common for the "underground" view to depict a state of reaching for more power than seemed inherent in the position. The denial of real power was feeling shared by the Personnel Manager, largely because his function lacked proper status within the organization insofar as it was advisory. And finally, the General Sales Manager, whilst not having a strong power position in Oriental Gas Products, exercised such as he had through the proxy of his subordinates because he was unable to speak the same language as the large proportion of the employees under him.

This variety of interpretation of the standing of power in the organization serves to remind us of the limitations of defining it in a context which does not properly take into account the role of key individuals with authority. It would not be entirely inappropriate to describe power as taking on a different hue depending on the angle of light which falls upon the person exercising it. It is not a commodity with discreet boundaries that can be measured with precision. We saw how the changes in structure and personalities in Oriental Gas Products changed between 1980 and 1984, reflecting the shifting sands of power as both cause and effect. The applicability of the Marxist dialectic perspective on power was also considered in respect of Oriental Gas Products. Certain parts of the approach were highly relevant to power as it was dramaturgically portrayed in the organization, par-

ticularly the function of social construction through the role of the actors and the emphasis on totality, or the need to see power as part of the larger developments in society. However, the assertions of contradiction (a challenge to the non-rational aspects of power) and of praxis (the re-construction of social conditions) were hardly relevant unless one took the view that the managers, and perhaps others, were conspiring in an attempt to bring down the distinctly capitalist structure of Oriental Gas Products. Contradiction and praxis may have other meanings to those who do not identify with the conventional marxist position. The challenging of the status quo and the re-construction of social practice are processes which, it could be argued, may be going on all the time in different forms in an organization. Nevertheless, as a basis for interpreting the way in which power is used in an organizational setting, the dialectic has a limited value unless one identifies four-square with the marxist notion that the inevitable thrust of modern society is the challenge to and the dismantling of the capitalist establishment and putting power into the hands of the people. In examining power, the thrust of this research has not been to adopt a political stance or to conjecture about the need for change in a certain direction, but to reflect the power situation as it was in a particular setting.

Insofar as Power was the primary hypothesis of this work and the reason why things happened, the second hypothesis of Control was advanced as being linked to it as the outcome of power initiatives. Apart from this linkage, control could take on different forms, most

obviously as one of the structural/technical tasks of management involving goal-setting, targets, reporting back, and measurement of performance. More subtly, control took on a Weberian mantle as the application of sets of rules laid down by the organization, under the banner of legitimacy, which in turn was a reflection of societal, even political, values of the place where the organization was located. As we noted in the discussion on power, regardless of the overall definition of its source and nature, control in this organization took on certain characteristics which reflected the personal character of the individual in authority who initiated it. This definition came close to the control exercised through "charismatic" authority elaborated by Weber (1961). Amongst the other two bases of control claimed by Weber (1961). Amongst the other two bases of control claimed by Weber, that which emanated from "traditional" authority or the birth or class of the leader seems to have been superseded in the modern organizational setting of Oriental Gas Products by the third definition, or "legal", legitimized authority inherent in the bureaucracy.

It would be tempting to characterize control in this organization as a process in which the movement was from the top down. Since the work contract was freely entered into by the employees of Oriental Gas Products, a more realistic perspective on the observed behaviour was that control involved an exchange of resources by two parties. The control from the top down certainly was in effect, but it was reciprocated either by a tacit assent through the work contract that such initiatives were accepted or by a more overt acceptance. Although the

structure of industrial relations was weak in the company, there were nevertheless attempts at consultation and other informal process in this organization which underlined the fact that control involved an exchange in both directions.

Some writers have suggested that control is influenced by technology (Woodward, 1958) and by external market environments (Burns and Stalker, 1961). The specific nature of the technology undoubtedly influenced control in this setting, particularly with reference to the need for safety in the handling of gases and the combination of process and mass production activity. This was also the case with the forces of external markets in the demands which they made in distribution in a relatively small but difficult territory to market the products. By the same token the effective absence of a requirement to export the product added to the ease of control in the marketing context. Reversing the emphasis, it has also been argued, notably by Child (1977) that the nature of control has an impact on certain choices in organizational style, such as between centralization and delegation, between formalization and informality, and heavy supervision in comparison to light supervision. The experience within the relatively small organization of Oriental Gas Products suggested that no easily-defined polarity presented itself in these areas: it varied by function and with the personalities involved. If an overall definition were to be attempted within these criteria, it would have to be that this organization tended towards delegation, informality and light supervision because of its small size. If the organization were to

grow considerably in size, the pull towards more centralization and formalization would seem to be inevitable.

Forms of control are quite often preceded by decision-making at the managerial level. It is only natural, therefore, that we should consider the "climate" of decision-making within this organization and whether, in the multiplicity of situations and individuals involved, it is possible to characterize the environment of decision-making which led to control. The basis selected for this assessment was the decision-making model developed by Thompson and Tuden (1959), subsequently modified by Stout (1980):

		Valuational Premises	
		Agree	Disagree
Factual Premises	Certain	<div>Programmed</div> <div>1</div>	<div>Negotiated</div> <div>3</div>
	Uncertain	<div>Pragmatic</div> <div>2</div>	<div>Chaos</div> <div>4</div>

When we look at the two axes, it was clear (and agreed by the managers encountered) that the factual premises surrounding most of the decisions in this organization tended to be more certain than uncertain. Such was the nature of the product, the technology producing it, the market and the environments that they were not subject to violent swings that made the basis of the decisions generally uncertain. The major decisions had already been taken to go into this territory to produce

and market the product line; despite recent competition and the effects of a recession, it could not be said that Oriental Gas Products operated in situations of turbulence. In terms of the valuational premises, it was not the case that interaction between the principal actors took place in largely public discord. Whilst Oriental Gas Products was no more immune than any other small concern from forms of inter-personal discord and organizational politics, the atmosphere regarding continuous business decision-making did not reflect more than partial disagreements. The positioning on the model would therefore suggest that the path to control in this organization was largely, programmed, with occasional resort to pragmatic solutions and negotiated positions.

In the final analysis control came through a combination of the procedures established by the principal actors, supplemented by a flow of decisions which either dealt with non-standard situations or a new directional policy when the forces demanded it. To complete the picture, we must also look at the dramaturgical perspective to see how the actors interpreted their remit to control their function in the organization and how this mosaic reflected the critical interface between the authority in a position to institute control and the individual's interpretation of that role. The Managing Director clearly perceived the small size of the organization as the key to his approach in this respect. In the technical and commercial areas he relied on reports, budgets and standing instructions to give feedback on how targets, criteria and systems generally were operating. His description of this

process was that it was largely "about fine tuning". However, the size of Oriental Gas Products was of assistance to the Managing Director in allowing him to have face-to-face contact with his principal managers and the more informal gathering of an "inner cabinet" to keep in touch with methods of control. His style was one of a balanced all-rounder, using a judicious combination of systems and immediate access to people to run the company.

The Finance Manager relied wholly on his authority and the intrinsic nature of his function to effect his form of control ranging over the whole organization. Extending from budgets, costs, capital and re-current expenditure to credit control with customers, here was the essence of control by a de-personalized system and, in the eyes of the principal actor, the all-prevailing system of discipline affecting the organization. Even the physical control of gas cylinders came under the finance, rather than the distribution function. If the nature of financial functioning conditioned the human interpretation of control in a certain way, it did so in a different way in the case of the General Marketing Manager. It could be argued that the marketing function is as all-embracing to a business organization as that of finance. Whether this the case or not, the personality of the Marketing Manager was crucial in the emergence of a balanced approach to marketing control, using a mixture of targets and reports, flexibility to the short term marketing cycles, and personal contact with both customers and the sales team. A comparison of the approaches of the Finance and Marketing Managers would suggest that the inherent factors in the po-

sition of authority combine with the special characteristics of the person to bring about a pattern of control.

The Operations Manager also displayed an outlook on control which reflected characteristics of the nature of work undertaken allied with a perspective which gave an insight into her perceived power position in the company. The production of gases and maintenance of the equipment were the subject of strong technical control with specifications and critical definitions of performance. Access to performance criteria in the other companies of the multi-national further emphasized the strength of technical control, which was dominated by the needs of safety. In contrast to the views put forward by the Finance Manager, financial controls were seen as the servant of operational controls. Although the Operations Manager was not able to speak the lingua franca of the majority of her employees, she maintained a strong personal element of control in her area through the use of two levels of supervision.

The Distribution function embraced one third of the workforce, with a considerable number working outside the organization at any time. These features led to a high level of "automatic" control through efficiency indices and call ratios amongst the widely-dispersed resources in the area. As if to compensate for the de-personalising effect of these controls, the Distribution Manager was at pains to stress that he encouraged the "self-starting" element amongst his large staff and what may be described as a club atmosphere between people who could rarely have seen each other in the daily round.

The Sales function was similar to distribution in that daily and

weekly control was effected through reports, ratios or situations already established through objectives and targets. However, the cultural factor seemed to intervene in the process, since the manager responsible had to rely heavily on subordinate supervision because of his inability to speak the language of most employees, and indeed of the customers, and so was unable to enter into the normal business exchanges that would be associated with the role of a sales executive. This role appeared to be taken up by the immediate superior in the structure, the General Marketing Manager, who was locally-born and raised.

The Personnel Manager had arguably the smallest area of direct control under him, owing to the largely advisory nature of the function and the few direct employees. Specifically he set advisory guidelines for recruitment, salaries administration and training. However, he admitted that the only control that he exercised was to try to bring about consensus and compromise in the organization, which he saw as a whole as a network of systems of control.

Far from having a unitary or necessarily consistent theme that it played, control appeared to formulate from a number of quarters: factors inherent in the nature of the job with the authority to control; factors in the person establishing control initiatives (including style); factors in those people who are being controlled (receptivity, acceptance, interpretation of meaning); and factors specific to the situation where control is applied (timing, favourability, likelihood of success).

The interaction of the organization with its Environments has

been a major focus of our attention with Oriental Gas Products. The earliest encounters, within this organization indicated that the exchange of information with various environments played an important role in the activities which the organization undertook, the tasks that it set itself, its response to stimuli sent out by an environment, As was stressed by Dill (1958, 1962), the organization is in itself a system for the processing of information and, in a sense, involved in a continuing learning experience with its environments. Essentially, the environments and the signals that they sent out were those perceived by the key members of the organization, and not a set of factors that could necessarily be measured objectively (Duncan, 1972), (Aldrich and Mindlin, 1978). If this were not the case, the whole process of decision-making in an organization would be reduced to the level of automatic programming and would be de-personalized in the process. The organization is a living organism with degrees of openness and closedness to its environment which are dependent on human discretion and judgement being exercised.

There has been a healthy debate over the years as to whether the organization-environment interaction takes as its spring source the analogies with the natural selection processes of the biological sciences and the equilibrium states described in classical physics on the one hand, or typologies based on factors which are inherent in the organization or environment on the other. In the latter area, Emery and Trist (1965) introduced a concept at the social level of analysis which they described as the causal texture of the environment. This

they saw as a quasi-independent domain which contained four "ideal types" of causal texture which characterized the real world in which organizations operated:

- the placid, randomized environment with relatively unchanging goals which were randomly distributed.
- the placid, clustered environment where goals and influence are not randomly distributed but are clustered to focus the attention of the organization and require strategy rather than tactics.
- the disturbed-reactive environment: the equivalent of an oligopoly market where initiatives have to be taken to counter competition.
- turbulent fields, where environments are subject to uncertainty and dramatic change.

The managers within Oriental Gas Products faced a world in which elements from the second and third of these domains were present in their environments in the form of the distinctive markets for industrial and medical gases together with equipment, and the emergence of competitive activity to the extent of up to 20% of the market.

Comparisons may also be drawn between the organization and the dual typology put forward by Burns and Stalker (1961). These authors drew the distinction between the appropriate structure of, and environmental demands upon, organizations which were primarily "mechanistic" and those which were "organic". The former type portrayed the dominant characteristics of Weber's rational-legal bureaucracy, with specialist

tasks defined and precisely defined, a clear hierarchy of control, an emphasis on vertical interaction between superiors and subordinates and an insistence on loyalty and obedience. Insofar as this type of organization was put forward as the most appropriate to deal with relatively stable and predictable environmental conditions, many aspects of the structure and the various environments of Oriental Gas Products were mechanistic. The "organic" type of organization was portrayed by Burns and Stalker as adaptable to new and unfamiliar problems continually arising, calling for continual adjustment and re-definition of individual tasks, with the emphasis on the contributive nature of knowledge. Whilst not totally absent in Oriental Gas Products, this type of organizational and environmental influence was not generally recognizable in the day-to-day affairs of the company. Use of the criteria advanced by Burns and Stalker suggested to the writer that characterization of organizations as wholly mechanistic or organic was not an easy task and that it was possible to identify situations in which the organization moved between both extremes of the continuum whilst being under the influence of one of them as a general rule.

The argument put forward by Burns and Stalker (1961), later reshaped by Lawrence and Lorsch (1967), that in different ways the environment conditioned organizational activity and interacted with it, was a persuasive one. In the case of Lawrence and Lorsch the theme was taken up that in a diverse, dynamic environment, the effective organization must be highly differentiated and integrated. In a more stable, less diverse environment, the organization is conditioned to be less differentiated but retain a high degree of integration. Ori-

ental Gas Products operated mainly in a stable environment, and this, allied to smallness of size, brought about something closely skin to the high degree of integration and lesser differentiation identified by Lawrence and Lorsch.

It was also difficult to avoid an identification of Oriental Gas Products and its environments within the large, influential and attractive paradigm which emerged from the biological sciences in the shape of the natural selection and adaptation perspective. Tracing its origins back to Darwin's "Origin of Species by Means of Natural Selection" (1859), subsequently adapted by Von Bertalanffy (1950), Hawley (1950), Campbell (1969) and Hannan and Freeman (1974), this perspective takes the position that organizations in parallel to other organisms come into being and are sustained through the ecological processes of variation, selection and retention. After their birth, which is an integral part of the process, organizations negotiate with their environments through managers in the dominant coalition to identify opportunities and threats, to formulate strategic responses and the structure of organizations is adjusted accordingly in response to these encounters. The character of the relationship between the structure and environment thus emerges as reflexive, adaptive behaviour and a learning process at the same time. Whilst this definition could be applied to a multiplicity of activities in Oriental Gas Products, it needed to be amplified in order to recognize the role of key figures brought in to the organization from time to time at a senior level which reflected a political process. In an earlier structure of the

company a very senior French executive had been brought in, effectively as second in the hierarchy. This position obtained until he left and the subsequent re-alignment of forces reflected personalities and their respective power positions in a somewhat different way. Whilst it may be argued that such changes are in themselves part of the natural selection process, the broader picture was comprehensively embraced by Pfeffer and Salancik (1978), when they perceived that organizational environments could interact with organizations not only in the manner by now widely recognized, but also influenced the distribution of power and control within the concern, the selection and removal of executives, as well as organizational actions and structure.

As we would expect, the relevance of the principal actors' perspectives on their environments from a dramaturgical point of view was clear, and the exercise revealed insights some of which were independent and some complementary. The Managing Director appropriately highlighted the position of Oriental Gas Products as the subsidiary of a joint venture between two multi-national organizations. Whilst this environmental influence was clear-cut and of primary importance in the positioning of key managers in the organization, it would not be fair to indicate that the interaction between the two multi-nationals and the company was intensive: the relationship was more in evidence through the exchange of technical information and the periodic monitoring of results obtained. The local environment was dramatically contrasting. In the immediate locale the picture was one of government regulation, an emphasis on safety and the problems of multi-depot distribution in

a large but compact city-state with the widespread phenomenon of high rise buildings. Outside the immediate locality the contrast was extraordinary, with the development of a joint venture enterprise with the country of contiguous boundaries containing a quarter of the world's population. The potential was far greater than that which was evident from performance at the point of encounter with this company. On a final note, the Managing Director elaborated on what subsequently became clear - that direct contacts with the organization's environments affected the line of managers beneath him and it was not within his gift to deal with the situation alone.

In keeping with perspectives expressed earlier, the Finance Manager saw environments almost entirely through the specialist criteria of the finance function. High interest rates and the eccentricities of currency fluctuation mean that great pressure had been brought to bear on the kind of credit control policies pursued, particularly with respect to stock and debtor, policies. Apart from an acknowledgement of the importance of competition, environmental influences were seen by this manager in terms of the financial rather than the physical. A broader view was taken by the General Marketing Manager, who identified relations with China as having the greatest environmental impact on this organization both potentially since it was due to absorb the territory in a decade, but also because its development plans called for a commitment from the company which was already well established. In contrast to the critical nature of the financial criteria mentioned earlier, this manager emphasized the broad marketing

base of the organization, and the fact that it was a service business to industry as insulating it against the gross excesses of international and marketing developments.

Somewhere between the views just expressed, the Operations Manager portrayed a broadly-based and balanced perspective on the ways that environments impinged on the organization and vice-versa. She was aware of a close affinity to external influences, but more in the sense of being the servant of rather than the creator of environments. Local, international and competitive phenomena were recognized as having an impact on a company that was quite resilient in its dealings with the world. The impression given here was of an organization which had realistically come to terms with its strengths and shortcomings in producing and marketing its product range. A lack of research capability had made Orietnal Gas Products strongly orientated towards the marketability and applicability of existing products.

Amongst the remaining three managers the perspectives on environments somewhat narrowly reflected the specialist subject area of principal actor. The Distribution Manager stressed the requirements of the legal regulations on operations imposed by government on his widespread and complex function. In Sales changes in the economy and the effects of competition were emphasized; and in Personnel the local market for obtaining people was advanced as the centre of attention.

In drawing together the multifarious strands which related this organization to its various environments, it was clear to me that they were not all of the same texture or colour. The most obvious per-

spective in the eyes of the principal actors was the structural, relating to the work which they did in their departments, the organization as a whole, and the external phenomena which were there for all to see. This perspective came the closest in identity to symbols that were tangible and, arguably, measurable. However, in their own right they were only meaningful in the sense that actors gave them a purpose and instigated courses of action as a result of the forces they contained and the context in which they were seen.

Behind the material manifestations of the structure and those forces which made up the environments of the organization were other forces which were less evident in material terms but no less powerful in their significance. These informal perspectives were identified under two broad headings: the situation which the organization found itself in when created and in sustaining itself for its appointed tasks (called for convenience the process perspective); and in parallel, but in relating intertwined with the process, the critical area of internal alliances and strategic choice made by influential individuals and dominant coalitions (called the political perspective). The process perspective is a recognition that the birth and continuation of the organization is an ecological effect of natural selection and that the desire to survive is conditioned by internal decision-making from a position of resource dependence with various elements in the environments. At the managerial base of the organization are the roles and domains perceived by managers, which do not always fit the descriptions which might emerge from statements of function in the structural perspective. Closely allied to this situation is the "po-

litical" perspective, alternatively described as "the meaning behind meanings", wherein managers are likely to form alliances, conspire, or in some way conduct themselves in their own interests, that of the function they represent or of the organization as a whole as they see it. The political perspective is the channel of human involvement and strategic choice which stands alongside such equilibrium states as may be struck between the organization and its environments, as was defined in the process perspective.

The final major dimension through which we looked at the organization of Oriental Gas Products was that of culture. Although we are aware for much of our lives of the richness of the differences between people on grounds of their cultural background, it has to be noted that many of the early efforts to characterize organizations by means of research or definition in writing chose to ignore the possible relevance of culture. The dominant themes espoused by early writers such as Taylor (1911) and Fayol (1916) were the twin ones of universalism and rationality. At a much later time Kerr et al (1960) were stressing that the onward progress of industrialization gave rise to a logical common pattern of organizational structuring. Harbison and Meyers (1959) emphasised that the same industrialization brought increasing specialization with greater size and the need for greater decentralization. These authors did mention culture, but it was to them only relevant insofar as it slowed the process down. A similar theme was taken up by Galbraith (1967), who described culture as a brake on the imperative of organizational development through greater

industrialization.

Over time the increasing recognition that culture was an operative feature in organizational life took one of two general approaches. Some writers adopted the approach that a cultural profile (usually of managers) could best be obtained by examining the attitudes, beliefs and values of people in organizations and this led to some inter-country comparisons. The other general approach was to measure the impact on structure of such features as educational characteristics, economic, social, political, and legal considerations in any given society. In the first of these areas there have been a number of studies concentrating on the managerial profile in single countries, carrying with them the distinctive flavour that this mode of enquiry brings. Amongst the largest inter-country studies, Haire et al. (1967), Bass (1967), Hinrichs and Ferrario (1974), and Hofstede (1970) took in attitude surveys of tens of thousands of managers and presented their response patterns either by the country when consistent attitudes were evident or by grouping countries into blocks when they shared common patterns.

There is a very worthy place in the record for studies which throw light on the rich pattern of attitudes which prevail in a country and, if carried out soundly, this approach may be of value in the recruitment and development policies affecting managers. The second general approach mentioned, characterized by typologies of various social affects on organizations, concentrated on group phenomena rather than the aggregation of individual attitudes. The contributions of Harbison and Myers (1959), Farmer and Richman (1965) and Negandhi and Estafen (1973) produced a number of descriptions of social forces at

work, but emphasized the managers as recipients of these forces than individually and collectively as the bearers of a cultural heritage which they brought daily to the working role. In the general paucity of analysis carried out on the cultural standing of multi-national enterprises, two of the most valuable contributions emerged from Perlmutter (1965) and Thorelli (1966). They touched upon the critical role played by the parent organizations towards the generation of a managerial philosophy amongst their subsidiaries. In particular, they contrasted those concerns where the subsidiaries had little autonomy, where corporate management reflected the policies of the Head Office (ethnocentric), those organizations which had great autonomy to manage their affairs (polycentric), and those run without any pre-conceived notions of omniscience of Head Office or the subsidiary in a cosmopolitan spirit (geocentric). In the sense that Head Office controls were very light, extending to occasional visits by a Regional Manager and the appointment of three out of the seven senior managers from the British and French parent companies, Oriental Gas Products could be said to be a good example of the polycentric.

The position taken in this research is that cultural effect is a phenomenon which is present in organizations through the collective theatre of the individuals who carry most influence in decision-making. Given the general climate of relationship, described above, which was identified within Oriental Gas Products could not be described in a simple fashion. Of the seven principal actors in this organization, three had come from a Western cultural milieu and four from the East.

It could further be argued that the two British and one French managers were in themselves products of different sub-cultures. The difficulties to grappling with the concept of culture at the micro level are also compounded by the age, experience and susceptibility of actors who are taken out of the milieu which produced them to work in a new cultural context. How typical or consistent is a culturally-conditioned contribution by a person within an organization? This question begs a definition of the true meaning of culture in organizational life. Is it the set of rituals, legends and ceremonies inherent in the definition of corporate culture (Louis, 1980; Deal and Kennedy, 1982; Tichy, 1982)? Is it shared knowledge (Goodenough, 1971; Agar, 1982), or shared meaning (Hallowell, 1955; Geertz, 1973), or the vehicle for transmitting the mind's unconscious logic (Rossi and O'Higgins, 1980)? Is culture brought out by the demonstration of organization as theatre (Goffman, 1959; Mangham, 1978), as a set of texts (Ricoeur, 1971) or as the embodiment of psychic prisons holding organizational members (Morgan, 1980)? Whatever standing we attribute to these different emphases in the role of cultural factors in organizations, there is little doubt or disagreement over the role of human agency as the primary vehicle for the transmission of cultural values and for this reason we turned our attention to the principal actors in the theatre of Oriental Gas Products.

There was no doubt in the mind of the Managing Director that culture played a role in his organization. He saw it largely in terms of the difference between eastern and western values operating between

the actors in the organization. Western influence was depicted as learning towards the democratic in style. A westerner himself, he saw eastern influence as something of a closed shop in terms of interpersonal relations, with a marked unwillingness to criticize the other person. A special point was made of the manner of approach in negotiation with Chinese management. The latter invariably wished to keep arrangements vague so that the fine detail could be tuned later as the situation demanded, in marked contrast to their western counterparts who wished to have terms and agreements couched in precise, legalistic terms. Oriental Gas Products was therefore a hybrid cultural setting, whilst at the same time it transmitted a strong corporate cultural message from the values of the parent companies.

The theme of emphasizing the contrasts between east and west was picked up by the Finance Manager, but in doing so he stressed that there was no "cultural clash" within the organization. Whilst touching upon the legalistic/informal dichotomy noted by the Managing Director, he highlighted an important cultural phenomenon amongst Chinese people - the notion of giving "face". The idea behind this concept is that in any dealings between two parties, the person in a position of initiative or superiority over another person must so arrange things that the second person is accorded respect, even reputation, or at very least an honourable way out in the public consideration of their dealings. Such an idea is not absent in a number of cultures, but it is recognized as particularly important to Chinese people and not to be ignored by people dealing with them from other cultural milieu.

The General Marketing Manager, who was Chinese, took the view that although cultural differences were evident amongst the principal actors, the effect was a largely positive one, whilst slowing down managerial activity somewhat in the process. His phrase "different views and different visions come up" had been tempered over the years by a situation in which some 80% of the European negotiators in his area had been replaced by Chinese executives - a trend which could be expected to continue up to and beyond the reclamation of this territory by China within a ten year period of our encounters. He also noted a change in the system of personnel appraisal in the company from scrutiny of the person to activity and performance. It could be debated whether such a move was a switch in cultural emphasis to the Chinese desire to grant "face" or a move to bring in consideration of the overall situation relating to performance. This manager also noted the relative docility of the Chinese labour force, in contrast to their counterparts in western countries, stressing the strength of the work ethic amongst whatever other cultural factors may have been at work here.

The Operations Manager, who was British and female, saw enormous cultural differences between herself and her fellow workers in this context. Whilst seeing the forces of west and east co-existing, she characterized the eastern as dominant, somewhat inflexible, conditioning the lives and attitudes of the majority of her fellow workers with its stress on authoritarianism and the work ethic. By comparison she did not see western values being stamped upon people so strongly, but

whenever it was present it took on a more diplomatic mantle of concern for people and efforts to pre-empt difficulties.

Cultural cameos emerged in rich forms from two other managers who were both actively involved in coming to terms with cross-cultural differences in their daily lives and between each other. The Distribution Manager, who was Chinese, saw a greater cultural divide between the British and French as represented in his company than between the two dominant ethnic groups, the British and the Chinese. In his perception, the British were given to facing problems as they arose, the French reaction was to avoid problems (based upon a sample of one or at most two in Oriental Gas Products), whilst the Chinese population in the majority were willing to adapt to western ways as demonstrated by the small group of senior managers in their organization and ready to accept authority. The French Sales Manager spoke poor English which was then, for the most part, translated into Chinese in the day-to-day interaction within his Department. His stereotypes of the ethnic groups mentioned above were of the British (intuitive), the French (logical), and the Chinese (authoritarian, respecting authority and seniority, given to the work ethic, and requiring "face").

The portrayal of such stereotypes plays an important part of the dramaturgical process with respect to cultural influence. If we endeavour to aggregate these micro scenarios in a complex small organization such as Oriental Gas Products into a broader conceptual framework, it is necessary to try to trace the stages through which the individual moves in contributing to the situation in which the cross-

cultural phenomenon is apparent in an organization. Our model must begin with the modes of Cognition, whereby people select and interpret the world in which they live (usually a mono culture and not distracted by a multi-national working situation). At this stage the impressions fall upon the distinctive modes of thinking, imagination, reasoning and decision-making which appear amongst groups with a unifying ethnic, historical, and social background. By this means certain paradigms appear in the individual and collective minds and form the basis of cultural thought patterns. The Motivation to use these paradigms or theories comes into play when they operate both as individuals and organizational members in the real world. The resultant Behaviour is acted out on the stage of the organization to which the individual is affiliated. What happens between this behaviour and the original cognitive patterns is a matter for conjecture, but the position taken here is that a process of review or learning takes place, normally associated with the rewards of such behaviour, taking into account organizational factors and other experiences which have been learned.

A number of paradigms have been considered which purport to embrace the difference between cognition in the East and the West. The more prominent amongst these, notably Needham (1978), Nakamura (1964), Chan (1967) and Benedict (1946) have drawn heavily upon anthropological perspectives which reflect the rich cultural vein which lies in human organizations and which has been largely ignored in the broad development of ideas on what constitutes the fabric and motor of the organization. It could be argued that all organizations, not solely the

multi-national enterprises, have fundamental decisions to take on whether they encourage the indigeneous cultural influence to flower in terms of behaviour, decision-making, and the like, or whether they wish to substitute this with a form of corporate culture or the company stamp on doing things. We are left with our perceptions of Oriental Gas Products, which suggest cultural variegation in its personnel and environmental setting, and the lingering thought that the organization, with all the other processes which are apparent in it, is the ultimate cultural phenomenon.

Reflections on the Research Experience

As I came to the end of the encounters with this organization, I am aware of having come through a considerable learning experience. The situation at the outset was described earlier as open-postured on both sides, with an absence of conditions laid down for the lines along which the research should proceed. For my part, that which was brought into the research experience was a considerable amount of experience working for organizations, both industrial and academic over some thirty years, a familiarity with the huge and burgeoning literature on organizational analysis, and in the first instance a tilting towards the positivist, "objective" means of describing organizational activity as a norm, or at least the most widespread method for tackling the task at hand.

It was against this background that I embarked on a series of visits to the organizations associated with Oriental Gas Product under the same multi-national umbrella. At this stage the bases of curiosity were being formulated in my mind over the role of power, control, environmental inter-action and culture in the organization.

The visits to Singapore, Malaysia, Indonesia as well as Hong Kong were exploratory, based upon a set of questions requiring standardized responses with the four dimensions outlined above. A provisional intention at this stage was to effect an inter-organizational comparison of response patterns, which at first seemed possible since all the organizations were approximately the same size and, with minor exceptions, had a similar pattern of managerial appointment. This proved to be a crucial point in the development of my thinking about research perspectives and methodology.

Two major areas of concern developed in my mind when this stage had been reached. Firstly, I was trying to measure horizontally across human perspectives in organizations in a manner which might have been appropriate for material things or situations that could be described with objectivity. Secondly, I felt that the true meaning of the perspectives came through in the setting of one organization, and such interactions and comparisons that could be drawn were most meaningful in a mono-organizational setting. These areas of concern led me to take stock of the assumptions that had been rooted in my mind about the usefulness of the "normal" positivist approach for the situation in which I found myself. It had not fully occurred to me before this time that the phenomena with which I was dealing were not objects which were present in this shape or another in different organizations that could be weighed on a scale. They were part of the living experience in each organization, not necessarily linked between one organization and another, but truly reflected in the moving picture of each concern in a situation of contingency which was appropriate for that concern alone. The pattern of interaction and

importance of the four dimensions in one organization could not be replicated in another: indeed, it was not possible to trace consistency of effect through from one generation of managers to another in the same organization over a relatively short period of time.

The literature which I had read in organizational matters was concerned largely either with a philosophical definition of the dimensions or an attempt to state universal truths that were applicable to all forms of organization. I had now come full circle in my thinking that the presence of human agency in addition to material phenomena in the organization opened up a new range of possibilities for looking at the perceptions through the eyes of the principal actors in an interpretive mode rather than as a road map which has to be classified. The outposts of the literature were certainly to be visited along the way, for they had a great deal of illumination to bring down on the subject with a number of different emphases. However, the literature on its own did not provide an adequate basis for the true purpose of this research, which were to enter into the life of this organization, to have temporary access to the lives and perceptions of the key managerial personnel on the dimensions described, and to provide the basis for interpreting the interaction of these perceptions at a moment in time.

The question of characterizing the moving features of an organization is not one that has successfully been dealt with outside of attempts to "photograph" stills of the organization at successive periods of time. The changeability of human reaction to situations at work as well as the moving pattern of appointments and dynamic

involved in interaction on a day-to-day basis, all spell out the awesome difficulty facing the research worker in coming to terms with the moving quality of human agency as compared with more obvious tangibles as technology, size and external forces. Change in human response patterns is so difficult to realise that it is for the most part ignored, and researchers have taken safer refuge in their typologies and other classifications of observable phenomena.

I have attempted in this research to come to terms with the organism represented by a group of people brought together for the purpose of manufacturing and selling a range of products in a multi-national setting. Concepts from the literature have been used for putting the work in a context and for sign-posting where previous attempts at classifications of people and work appear to be more or less relevant. A central feature of the work was the personal encounter with a small group of people holding managerial positions and who were deemed to have appointments which were important enough to give them degrees of power, the right to initiate controls whether linked to their power or not, who were representatives of their organization in the interactions which took place with a number of different environments, and who in themselves were the bearers of certain cultural effects both in themselves and as part of the organization for which they worked. The encounters were personal and interpretive rather than impersonal and "objective" in their nature because of a feeling which I had developed over several years that it is preferable to be part of an organization from within than to visit it as an outsider with a framework of assumptions if the purpose is to come close to the reality of what goes on in that organization. The

true reality lies in the day-to-day interaction of individuals possessing forms of power within the organization which results in a variety of outcomes in the continuing life of that organization. One of the difficulties that lies before the researcher in these circumstances is the element of uncertainty which can act as a differing casual agent between acts of initiative and their resultant outcomes. This one element makes all the difference between the patterns of certainty, even predictability, which lie at the heart of a positivist approach to a situation and the importance attached by an interpretive approach to a more sensitive form of deduction, based on individual accounts, shedding light on the patterns of the organization. At the beginning of this enterprise I had a purpose to present a cohesive picture of an organization at work revealing the sinews through which the muscles moved themselves. The result has been the tapping of a complex situation, revealing intricate facts intertwined with personal perspectives and with outcomes not always matching the anticipated hope built into initiatives.

The organization presents itself with one or two layers of reality. There is that which everyone would agree and which is most notably related to single, even predictable, outcomes. But there may also be present the reality which emerges in the perception of someone about a situation - the alternate reality - which can result in situations changing and outcomes which do not fit the pattern of the first type of reality described. As organizational members we are likely to find ourselves negotiating the two types of reality in pursuit of the outcomes that we wish to bring about.

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